# TECHNICAL AND FINANCIAL FILE

# **SUPPORT TO THE SPAT-II:**

MARKET ORIENTED ADVISORY SERVICES AND QUALITY SEEDS

## **RWANDA**

**DGDC CODE: NN 3008338** 

**NAVISION CODE: RWA 09 071 11** 





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## **ACRONYMS**

AAS Agricultural Advisory Service

AFSR Appui à la Filière Semencière au Rwanda

AMIS Agriculture Management Information System

APEL Appui au Petit Elevage, Belgium-Rwandan Livestock project

AVRDC World Vegetable Center

CAADP Comprehensive Africa Agriculture Development Programme

CATALIST Catalyze Accelerated Agricultural Intensification for Social and

**Environmental Stability** 

CC-AFSR Conseil consultatif des Acteurs de la Filière Semencière au Rwanda

CIAT Comité International d'Accompagnement pour la Transition

CICA Center for Agricultural Information and Communication

CIMMYT International Maize and Wheat Improvement Center

CIP Crop Intensification Programme

DAPF District Agricultural Platform

Delco Délégué à la cogestion = co-management delegate

DUS Distinctness, Uniformity, Stability

FFS Farmer Field School

GRB Gender Responsive Budget

GMP Gender Monitoring Office

IFDC International Fertilizer Development

IITA International Institute for Tropical Agriculture

ILRI International Livestock Research Institute

IFMS Financial Management System

IMP Integrated Pest Management

INGABO Farmers Trade union

INIBAP International Network for Improvement of Banana and Plantain (operates

under Bioversity International)

IMBARAGA Farmers Trade Union

IPER Initiative for the Promotion of Rural Entrepreneurship

IRRI International Rice Research Institute

ISAR Institut des Sciences Agronomiques du Rwanda

JADF Joint Action Development Forum

KWAMP Kirehe Community-Based Management Project

MAF Manager Admin and Finance (BTC Representation Office)

MD Managing Director (RAB)

MIGEPROF Ministry of Gender and Family Promotion

MINAGRI Ministry of Agriculture and Animal Resources

MTR Mid-Term Review

M&E Monitoring and Evaluation

NAASCO National Agricultural Advisory Service Committee

NAES National Agricultural Extension Strategy

NGP National Gender Policy

OPV Open-pollinated varieties

PAPSTA Programme d'Appui au PSTA

PASNVA Projet d'Appui au Service National Agricole

PS Permanent Secretary

PSTA Plan Stratégique pour la Transformation de l'Agriculture

QDS Quality Declared Seed

RAB Rwanda Agriculture Board

R-ABC Rwanda Agro-Biodiversity Center

RWF Rwandan Franc

SC Steering Committee

SNV Netherlands Development Organisation

SPAT Strategic Plan for the Transformation of Agriculture

SWAp Sector-Wide Approach

TA Technical Assistant

TFF Technical and Financial File

TOT Training of Trainer

TOF Training of Facilitator

VCU Value for Cultivation and Use

WARDA West Africa Rice Development Agency

Concertation platform = Amahuriro

Innovations = Udushya

# **Analytical record of the intervention**

Intervention number DGDC	3008338
Navision code BTC	RWA 09 071 11
Partner Institution	MINAGRI
Duration of the specific convention	6 Years
Expected start of the programme	End 2010
Local Contribution	In kind (see agriculture Investment plan and MINAGRI recurrent budget)
Belgian Contribution	18.000.000 EUR
Sector	Agriculture et Livestock – Agriculture development (CAD 31120)
Overall Objective	Agricultural outputs and incomes increased under sustainable production systems and for all groups of farmers, and food security ensured for all the population <sup>1</sup> .
Specific Objective	Improved access to advisory services for crops and livestock and access and use of high quality planting materials of food crops for men and women
	Result 1: Seed production chains of specific groups of food crops with a market value are professionalized.
	Result 2:Increased private sector involvement in the seed sector.
Expected results	Result 3:Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services established.
	Result 4:Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations trained.
	Result 5:Lessons learned on agricultural advisory services and seed supply services documented and used in policy and decision-making.

<sup>&</sup>lt;sup>1</sup> SPAT II Overall Objective page 49

## **Executive summary**

#### Introduction

The Rwanda government has adopted a Sector-Wide Approach (SWAp) to stimulate agricultural development. To implement this sector wide approach a Strategic Plan for Agricultural Transformation has been developed in 2008 (SPAT II), which follows the PSTA I that was elaborated in 2004.

The Belgian Cooperation is supporting the government of Rwanda, and specifically MINAGRI in the achievement of the SPAT II objectives. The Indicative Programme 2007-2010 of the Cooperation between Belgium and Rwanda had foreseen for 2010 the start-up of 4 projects in the agricultural sector:

- 1. Support to the seed sector, as a second phase of the current AFSR project;
- 2. Support to the National Service of Agricultural Extension, as second phase to the PASNVA project;
- 3. Support to agricultural value chain development;
- 4. Water in agriculture.

An identification document was elaborated by MINAGRI and approved by the Partner Committee in May 2009. Rather than developing 4 separate projects, it was proposed to formulate 1 integrated programme, aiming at supporting the implementation of the SPAT II. The identified 4 priority areas for intervention

- 1. Support to the seed sector;
- 2. Support to the National Service of Agricultural Extension;
- 3. Support to animal health services;
- 4. Water in agriculture

A pre-formulation mission by a delegation of BTC consulted in October MINAGRI and donor representatives as well as the different MINAGRI and BTC staff involved in the current projects executed with assistance of BTC. In close consultation with MINAGRI it was decided to focus a new support programme to SPAT II on seed sector support and agricultural advisory services. This will be done through a 5 years program and with a financial contribution from the Belgian Cooperation of 18 million Euro.

## Agricultural Advisory Services in Rwanda

As a result of the 1994 genocide the national agricultural extension system had virtually disappeared. After the crisis NGOs and producer organizations started providing advisory services, while the government started rebuilding the public system. Currently the public extension system is largely implemented at the decentralized district level, supported by the agencies of MINAGRI. The MINAGRI agencies will be merged to improve collaboration between agricultural research and extension, and expertise will be relocated form the national level to 4 zonal offices.

SPAT II emphasizes the importance of the improved access and use of knowledge in the

process of transforming agriculture in Rwanda. This should be achieved through the professionalization of farmers and their organizations and the development of effective technology generation and dissemination systems. The National Agricultural Extension Strategy, developed under the PASNVA project recognizes that different actors such as public bodies, producer organizations, NGOs, agri-business and private bureaus play a role in the national extension system. The PASNVA project has piloted with district agricultural platforms, linked to the District Joint Action Development Forums, to coordinate agricultural extension initiatives, providing valuable insights for a new programme. Furthermore an Agricultural Communication and Information Center (CICA) was initiated in which MINAGRI bundles its capacity in this field. The Integrated Pest Management project has shown the effectiveness of the Farmer Field Schools method in the Rwandan context.

Finally the clients for agricultural advisory services are diverse, which means that also their needs for services are diverse. It is essential to consider the needs of different types of agricultural producers to assure all get access to the advisory service they require.

#### Seed supply services in Rwanda

A national seed policy has been elaborated and was published in October 2007. In the policy an important role is giving to private entrepreneurs in seed production and distribution, while the state will concentrate on regulation and quality control, and support the organization of seed producers and access to credit for seed production. The policy specifically recognizes the importance of formal certified seed production and informal seed production.

Programme 1 of the SPAT II emphasizes the importance of quality seed and planting material for the transformation of agriculture. The general objectives in relation to seed are to:

- 1. Increase the rates of adoption of certified seeds and
- 2. To strengthen control over seed development and multiplication to ensure quality.

As specific pillars of action the SPAT II proposes to:

- 1. Develop an appropriate legal and institutional framework for certified seed;
- 2. Increase the production of basic seed;
- 3. Strengthen capacities devoted to seed multiplication and distribution;
- 4. Promote the demand for high quality seed through raising awareness on the economics of its use

The AFSR project has contributed to the emergence of private seed multipliers, who produce certified seed for profit. Currently about 1,5% of the seed demand is met by certified seed. Mainly for grains such as maize, wheat and rice quality has become available and also the availability of certified seed potatoes has improved. In spite of the emerging private seed multipliers, the RADA seed unit plays a dominant role in seed production and distribution, while it is also responsible for quality control, certification, and capacity building of multipliers. The organization of seed multipliers (CC-AFSR) is in its infancy and depends on project support. Private seed treatment, packaging and storage

capacity and a commercial distribution network for seeds are absent.

#### Implementation principles

The new programme will be fully embedded in and be executed as part of the activities of MINAGRI and contribute 100% to the objectives of SPAT II. It will align with the restructuring of MINAGRI and the decentralized governance model, giving responsibilities for programme execution to the zonal RAB offices and the districts respectively where executive power for these levels is foreseen by the governance structure of Rwanda.

The programme will be implemented countrywide aiming to improve agricultural advisory services and quality seed supply in the whole nation. To realistically aim for this the programme has limited its scope of activities, and will restrain from large investments in infrastructure. Furthermore it will seek to make use of all existing rural organizations that can contribute to building an improved agricultural advisory service system, rather than building its own structures up to the level of Umudugudu.

The programme will work from a demand driven principle. Specific emphasis is put on building the structures through which clients of advisory and seed supply services can better voice their needs, as well as their opinion of services received. Advisory services and seed supply services will be focusing on marketable crops providing income to farm households. Specific emphasis will be put to assure that both men and women and all asset classes receive the services they require.

The role of Technical Assistance, both long term and short term, will be focused on capacity strengthening and general quality improvement in the execution of MINAGRI programs. There where there are structural shortages of personnel the program will provide resources for MINAGRI to recruit, under the understanding that the staff will be employed on the recurring budget of MINAGRI by the programme end.

The ultimate objective of the programme is the building of durable systems of service delivery. System building is a process which cannot be achieved without reflection and adaptation of the intervention based on insights gained. The programme will pay ample attention to learning during the implementation, and adaptation of the intervention based on this learning.

The programme will focus on building of a large pool and network of non-public service providers. Furthermore it will invest in building the capacity in MINAGRI to constantly support this pool of service providers with up-to-date knowledge on didactics, technologies and business development tools. The CICA will be supported by the programme to become a coordinating and resource center in this regard, supporting the RAB zonal offices in their assistance of advisory service providers.

The seed sector intervention will be specific for different crops or groups of crops with similar opportunities. Through differentiating between groups of crops with similar opportunities more targeted and effective interventions can be developed. Six groups of crops have been distinguished be it 1) Local vegetables and forage; 2) Fruit crops; 3) Cassava, banana, sweet potato; 4) Grains & pulses; 5) Potato; 6) Temperate vegetables and hybrid maize. For each crop a separate strategy will be elaborated depending on priority in the eyes of farmers, opportunity for household income increase through quality

seed and impact on more vulnerable groups. For each crop or group of crops a balance will be struck between private sector involvement where economically feasible and public responsibilities in the production and marketing chain where necessary to safeguard availability of quality seed. Furthermore a balance will be struck between improving informal seed production systems and improving certified seed production.

#### Programme activities and duration

The programme will be implemented during 5 years, with an inception and a closure phase.

Table 1 shows the 5 programme results and the underlying activities that will be employed to obtain the results. The first result focuses on professionalization of seed production. It entails the elaboration of the before mentioned seed production strategies, and professionalizing the different steps taken in the different seed chains, from participatory variety selection to foundation seed production, building the capacity of certified and local seed multipliers and adapted effective quality control mechanisms.

The second result focuses on increased involvement of the private sector on seed production. It will transform the basic seed production by RADA seed unit into a cost recovering or profit making enterprise, support the mergence of private seed treatment, packaging, storing and distribution, and the establishment of privately run tissue culture facilities for rapid multiplication of vegetatively propagated crops. The programme will assist where necessary through match making between private seed producers and credit providers.

The third result focuses on establishing the capacity in the districts to monitoring the demand for agricultural advisory services and the effective response at district level. District Agricultural Platforms will be set-up, based on the PASNVA experiences, as subcommittees of the JADFs. Zonal Agricultural Advisory Service teams will be formed at the zonal RAB offices to support the districts, wile at national level an Agricultural Advisory Service Committee will be formed to voice policy issues and concerns of national relevance. A fund will be established at each district to contract local service providers to respond to the articulated advisory service demands.

The fourth result focuses on building a pool of capable service providers in all districts. In the first place CICA will be strengthened to become a resource center for didactic methods and materials for agricultural advisory services. Secondly agricultural service providers will be trained, mainly following the farmer field school methodology. Thirdly farmers will be trained by these service providers so they can gain experience, build a reputation as well as create a demand for their services. Finally specific attention will be given to the routine monitoring of the effect of the use of extension materials and training curricula.

The fifth result focuses on learning form the implementation, and using the insights gained for improvement of the intervention itself as well as policies related to seed and agricultural advisory services. A thorough baseline and end of programme outcome assessment will be done. A specific M&E for learning framework will be designed and used. The National Seed Policy and the National Agricultural Extension Policy will be reviewed and adapted. Finally the programme will contribute to the elaboration of a sector

wide gender policy and action plan, and implement it in the context of the programme.

Table 1: Program results and their activities

rable 1: Program results and	
Seed production chains of specific groups of food crops with a market value are professionalized	<ul><li>1.1 Prepare tailor made strategies and action plans for groups of crops with similar seed system opportunities</li><li>1.2 Participatory variety selection for major food crops with market value</li></ul>
	<ul> <li>1.3 Improving efficiency of foundation seed production</li> <li>1.4 Building the capacity of certified and local seed multipliers</li> <li>1.5 Development and adaptation of quality control systems appropriate for the different groups of crops</li> </ul>
2 Increased private sector involvement in the seed sector	<ul><li>2.1 Transform the basic seed production of RADA seed unit into a Rwanda Seed Enterprise</li><li>2.2 Support the professionalisation of private multipliers and the</li></ul>
	development of a seed handling, packaging and marketing enterprise
	Match making between private seed producers and entrepreneurs and credit providers
	2.4 Support the establishment of a private tissue culture laboratory
	<b>2.5</b> Support the start-up of the Rwanda Agro-Biodiversity Center
3 Sustainable mechanisms for demand articulation and responsiveness of market-	<b>3.1</b> Set up District Agricultural Platforms, Zonal Agricultural Advisory Service Teams and a National Agricultural Advisory Service Committee
oriented advisory services	<b>3.2</b> Regular demand-articulation and needs assessment for advisory services
	<b>3.3</b> Inventory and registration of proximity agricultural advisory service providers
	3.4 Contract agricultural advisory service providers
<b>4</b> Proximity agricultural advisors capable of	<b>4.1</b> Strengthening CICA as a resource centre for agricultural advisory services
delivering responses to the	<b>4.2</b> Training of proximity agricultural advisory service providers
demands of farmers,	4.3 Farmer training and advice
livestock keepers and their organizations	<b>4.4</b> Monitoring of the use and effects of extension materials and training curricula
5 Lessons learned on	<b>5.1</b> Baseline study and end of project outcome assessment
agricultural advisory services and seed	<b>5.2</b> Development and implementation of an M&E for learning framework
documented and used in policy and decision making	<ul><li>5.3 Experience based policy making</li><li>5.4 Contribute to the formulation and implementation of a national sector-wide gender strategy and action plan</li></ul>

## 1 Situation analysis

## 1.1 National policy and institutional framework

The Government has formulated in 2004 a coherent strategy for the sector, the Strategic Plan for the Transformation of Agriculture<sup>2</sup> (SPAT), updated in 2008 as the SPAT II, bringing it fully into consonance with national strategies such as the EDPRS, the prospective long-term Vision 2020 and the National Investment Strategy. The SPAT II elaborates and develops programmes, sub-programmes and activities that will enhance agricultural development, the main objective being the transformation of subsistence based, smallholder agriculture into market-oriented systems farming. It is aligned around four strategic programs: (i) Physical resources and food production: intensification and development of sustainable production systems; (ii) Producer organization and extension: support to the professionalisation of producers; (iii) Entrepreneurship and market linkages: promotion of commodity chains and the development of agribusiness; and (iv) Institutional development: strengthening the public sector and regulatory framework for agriculture. Importantly, it also takes into account the Decentralization Policy of 2000, which seeks to involve local administrations more directly in the development process.

The Rwanda government has adopted a **Sector-Wide Approach (SWAp)** for the implementation of its Strategic Plan for Agricultural Transformation. The Ministry of Agriculture (MINAGRI) and Development Partners (DPs), Belgium included, signed a Memorandum of Understanding establishing the SWAp in the agriculture sector in December 2008, in accordance with the Paris declaration on aid effectiveness and the Accra Agenda for Action. The SWAp is built on a commitment from Development Partners to coordinate assistance around the SPAT with MINAGRI through the Agriculture Sector Working Group. As a result, SPAT II will be implemented through a 'SWAp Structure', phasing out stand-alone project implementation units (PIUs). In the place of PIUs, MINAGRI's SWAp Structure (see Annex 7.7) will hire four Program Managers and implementation teams, one for each SPAT II program. Implementation of the SWAp structure is being supported by several development partners, most notably through support from IFAD, DFID and Belgium in the form of the Support Project to the Transformation of Agriculture in Rwanda (PAPSTA) project.

MINAGRI has recently been in a process of institutional reform, and the six Agencies under MINAGRI are merged into two boards, namely Rwanda Agriculture Development Board and Rwanda Agricultural Export Development Board. The **Rwanda Agriculture Board (RAB)** will harmonize research and extension services and disseminate appropriate and integrated information and technology transfer services to farmers' organizations. The board functions will be delivered through 4 **zonal centres.** The importance of these zones will be to address key regional priority concerns while bringing research and extensions closer to the client, the farmer. The zones have been created with the consideration of the currently existing infrastructure for research and extension.

TFF Support to SPAT 2 (RWA 09 071 11) – version after Steering Committee of the 5<sup>th</sup> of October 2010

<sup>&</sup>lt;sup>2</sup> In April 2010, MINAGRI elaborated an Agriculture Sector Investment Plan 2009-2012. The SPAT II investment plan has a budget of 815 million of US \$ for three years (1009-2012)

Therefore, the precise services on offer at each centre would be a reflection of agroecological conditions, the needs of farmers organised by Commodity Chain Approach but it will also reflect the infrastructure currently in place and that which has to be put in place. With the zonal centres of Research and Extension it is hoped that greater synergy will be achieved (linking research and extension), unlike what it has been in the current arrangement, as well as realization of economies of scale. The zones should support the decentralized government in the implementation of Agriculture and Livestock programmes at local level much better and faster than has been the case. The **Rwanda Agricultural Export Development Board (RAEDB)** deals exclusively with the promotion and marketing (at local, regional and international markets) of agricultural produce especially those identified for Rwanda's export market i.e. coffee, tea and horticulture among others. It will also deal with international market research and analysis while at the same time engaging in fairs and exhibitions for Rwanda's agricultural animal and food products.

**A national agricultural extension strategy** (NAES) was adopted in April 2009. The NAES is based on a number of guiding principles, which are:

Participatory extension: all stakeholders define their vision, analyse their constrains and needs and, therefore, plan together for implementations, monitoring and evaluation;

- (ii) Multi approach and multi method: various methods and approaches are recognized, provided that they are effective and complement each other;
- (iii) Demand driven and market oriented extension: In addition to market needs and/or requirements, the interventions should be planned as per demand by different target groups, considering the specific conditions of the area or location, to enhance ownership, responsibility and accountability;
- (iv) Process and result-oriented extension: The process has to be as good as the results. Meaning that the expected or targeted results and/or impacts should be planned well;
- (v) Multi actor extension: The strategy recognizes the complementarities and potential synergy of different actors in agricultural development (farmers' organizations, research, extension, agricultural education institutions, input supply, micro credit and other public and private partners intervening in the sector;
- (vi) Building on already existing initiatives: Imihigo, Ubudehe, Integrated Development Program, Girinka, Agasozi Ndatwa, and other related initiatives that emerge and prove to be effective or contributing to IDP, for sustainable development. The specific objectives of the NAES are to promote farmer organizations and to encourage their participation in agricultural sector stakeholders "concertation" platforms, strengthen technical capacities of producers, improve proximity service delivery to producers in the perspective of gradual disengagement of the Public sector from direct extension service delivery and to promote a system of participatory extension and research adapted to the needs of producers, but also market requirements.

**A national seed policy** has been elaborated and was published in October 2007. The policy highlights the following main orientations:

- 1) The main focus of the national seed policy is to promote the role of the private sector and gradual government pullout from seed multiplication. This would allow the state to focus on coordination, regulation, quality control and other key activities that cannot be carried out by the private sector.
- 2) The government will support the regular release and maintenance of improved varieties.
- 3) The seed policy specifies four categories of seed, foundation seed, basic seed, certified seed and quality declared seed. Specific recognition is given to the importance of the informal seed sector for securing seed supply to producers and the need to simultaneously improve the quality of seed in this informal system and the formal certified seed sector.
- 4) Private sector involvement in seed marketing will be promoted by the government, and prices are established through normal market mechanisms of demand and supply.
- 5) The use of quality seed will be promoted through the national agricultural extension system.
- 6) The government shall put in place credit mechanisms promoting the production and use of quality seed.
- 7) Seed quality control mechanisms will be strengthened. Regulations will be flexible and adapted to changing circumstances to assure a continuous flow of seed to producers.
- 8) Seed import will be allowed in case of a national shortage. Export is envisaged for those crops for which Rwanda has an added advantage, provided national needs are met. Both import and export shall be controlled by the state.
- 9) A national seed council shall be established, responsible for the regular update of the seed policy. Furthermore the government will encourage further organization of seed producers and traders and their efforts to set-up quality control systems.

The Ministry of gender and the promotion of the family (MIGEPROF) formulated a **National Gender Policy** (NGP) that encloses guidelines to which sectoral policies and programmes refer when integrating the gender issues in their respective planning and programming. Implementation of the NGP requires joint action of different actors, decision-makers, development workers and the entire population. The NGP is not meant to be prescriptive. Instead, it provides the overarching principles. Recently (February 2010) a consultation has been launched in order to formulate a new gender strategy for the agricultural sector (in line with the NGP), the present programme will align with this new gender strategy.

## 1.2 The seed sector in Rwanda

## 1.2.1 Background

Seeds and other planting materials form the basis of crop production. Key issues in analyzing the contribution of seed to agricultural output are availability, price and quality. Seed<sup>3</sup> has to be available, which means that there has to be physical access to the right seed at the right time, and it needs to be affordable. The quality of the seed determines to a large extent the success of the crop in terms of yield (and yield stability) and product quality, and thus its contribution to food security and the value of crop products in the market. The quality of seed has several aspects:

- Its genetic properties, i.e. the inherent genetic makeup of the variety,
- The germination rate,
- Seed health,
- Seed purity

The genetic diversity provides options to cope with adverse conditions and risks, whether seasonal and in the short term, or climate change based in the long term. Farmers produce and/or hope to obtain seed that is adapted to their production scheme, natural, social and cultural environments, as well as market channels. The sources of seed can be recognized as formal or informal seed supply. The latter is also referred to as the farmers' seed system (Almekinders & Louwaars, 1999; Louwaars, 2007). Throughout the world, the largest quantity of seed of most crops is produced by farmers themselves. Informal seed systems produce both local and scientifically bred varieties. The National Seed Policy (MINAGRI, 2007) likewise recognizes the existence and importance of both the formal and informal seed system.

Programme 1 of the SPAT II emphasizes the importance of quality seed and planting material for the transformation of agriculture. The general objectives in relation to seed are to:

- Increase the rates of adoption of certified seeds and
- To strengthen control over seed development and multiplication to ensure quality.

As specific pillars of action of the current programme the following objectives are proposed:

- Develop an appropriate legal and institutional framework for certified seed;
- Increase the production of basic seed;
- Strengthen capacities devoted to seed multiplication and distribution;

 $<sup>^{3}</sup>$  The current document uses the term seed (single tense) as the generic term for reproductive material.

 Promote the demand for high quality seed through raising awareness on the economics of its use

## 1.2.2 Situation analysis of the seed sector in Rwanda

The National Seed Policy of Rwanda (MINAGRI, 2007) indicates that the informal sector accounts for approximately 98.5% of the total amount of seed used. The seed policy foresees investments in the formal seed sector with the aim to increase the volume of seed available and accessible to farmers to increase. An important effort in increasing availability of and access by farmer to improved seed has been the Support to the Seed Commodity Chain Project in Rwanda (Appui a la Filière Semencière du Rwanda – AFSR) Project.

Although the AFSR has not reached its very ambitious target of increasing to 10% the fraction of the total demand for seed that is covered by certified seed, it has made important progress in the formation of a class of professional seed multipliers. Compared to 2006, the area declared for certified seed production has doubled in 2009. The current 2010 A season shows a further increase by roughly 50% compared to the 2009 A season (Table 2).

Table 3 however shows that this increased production still falls short of the estimated demand for quality seed. Furthermore the table shows that a higher amount of certified seed, particularly for maize and rice, was produced in 2007, but a reduction occurred in 2008. This reduction coincides with the AFSR project not providing inputs for growers, but relying on seed multipliers accessing commercial credit to secure their inputs. This had a negative impact on the area under certified seed. However, the trend is being reversed, and seed growers currently manage their production currently without the AFSR providing inputs, which can be considered an important step towards a more sustainable and professional seed sector, that operates independent from government or project interventions.

The formal seed multiplication system hardly focuses on vegetatively propagated crops except for seed potatoes. Currently the market share of officially certified seed of potato is an estimated 1.1% of the total demand for potato seed. These figures should however be reflected upon with care. For almost all crops farmers can continue to re-use see for several generations upon initial purchase of quality seed. Furthermore it gets multiplied informally and spreads through informal seed supply, providing other farmers with seed of improved quality, but without certificate. Therefore the actual contribution of certified seed to the availability of quality seed for producers goes beyond the presented data.

Table 2. Area (ha) under certified seed production of the major food crops of Rwanda (RADA, 2010)

	Season								
	06A	06B	07A	07B	08A	08B	09A	09B	10A
Maize	124	114	416	191	178	80	264	81	617
Wheat	6	29	71	119	57	47	14	48	14
Rice	13	14	9	50	49	24	53	33	11
Bush bean	63	27	116	61	12	34	106	64	53
Climbing bean	4	6	7	2	13	20	39	19	21
Soybean	52		24	2	170	7	84	20	100
Peas	3	5	7	18	24	7	8	17	4
Potato	11	3	118	146	198	70	82	99	113
TOTAL	276	198	769	589	701	288	650	381	932

Table 3. Coverage for the availability of certified seed in Rwanda for the major food crops in the period 2006 – 2008 (excluding formally facilitated imports)

	seed repl						2007				2008			
	rate	repl rate	area	demand	supply	cover	area	demand	supply	cover	area	demand	supply	cover
			10001			0.4	'000			0.4	'000			0.4
	kg/ha	year	'000 ha	t	t	%	ha	t	t	%	ha	t	t	%
						16.4				25.1				10.8
maize	25	2	113	1413	231	%	141	1763	442	%	144	1800	194	%
wheat	100	2	19	950	22	2.3%	24	1200	71	5.9%	68	3400	59	1.7%
										21.2				
rice	30	2	60	900	11	1.2%	62	930	197	%	82	1230	101	8.2%
beans	60	5	360	4320	46	1.1%	358	4296	79	1.8%	337	4044	38	0.9%
peas	100	5	32	640	6	0.0%	37	740	3	0.4%	39	780	9	0.0%
soja	25	3	42	350	0	0.0%	50	417	16	3.8%	62	517	37	0.0%
potato	2000	2	139	139000	197	0.0%	124	124000	965	0.8%	127	127000	1404	1.1%

Currently the RADA seed unit plays a dominant role in the Rwanda seed system. In the first place it is responsible for the production of all basic seed. Secondly it is responsible for the quality control and certification of seed. Thirdly it is acting as seed distributor, buying certified seed from private multipliers, and redistributing this through mainly the Crop Intensification Program (CIP). This situation results in a clash of interests, as the RADA seed unit both produces and controls the quality of basic and certified seeds. The quality control system currently puts most emphasis on the certification of seed of cereals and potatoes. A single seed quality control agent is available in each province, which is currently just adequate, but will become too little once more commercial certified seed

multiplication will develop. Currently the inspectors are financed through the seed project, which is a regrettable situation. Ultimately the seed certification services should be supported by private seed multipliers paying for the services provided to them, possibly combined with a state subsidy, rather than through project financing. Furthermore it is essential that the certification body is independent from the seed producers at all levels, foundation, basic and certified seed.

A thorough economic analysis of the benefits of the use of quality seeds and a breakdown of the production costs of quality seed is currently not available. This is however a requirement for evidence based decision-making in relation to seed policies. It needs to be known which seed multiplication activities are profitable for seed multipliers and can thus be sustained by the private sector. Furthermore decision making by the public institutions requires to be based on economic and food security considerations. This also requires knowledge regarding both yield and income benefits of the use of quality seeds, in relation to the cost of quality seeds.

## 1.2.3 Lessons from the AFSR project

The final evaluation of the AFSR project of April 2009 provides valuable insight for the design of the seed sector component of the new programme. The main findings of the final evaluation relevant for the new programme can be summarized as:

- 1. An important achievement of the AFSR project is the initiation of the CC-AFSR, which unites at regional and national level private seed multipliers.
- 2. Private sector involvement in certified seed multiplication and the quality of production have increased.
- 3. In spite of having this objective, private sector involvement in basic seed production has not been achieved and is currently exclusively done by RADA.
- 4. A genebank was constructed and staff trained on conservation of genetic resources. It will require funding for its functioning.
- 5. Foundation seed production has been reinstalled by the ISAR seed unit, and is, with the exception of potato, sufficient.
- 6. A central seed laboratory was constructed at RADA and staff trained.
- Regional cells of seed quality control services were set-up and should allow for more effective service provision to seed multipliers. They remain however dependent on funding.
- 8. Commercialization of seed is still a weak point, and production of less profitable seeds is neglected by seed multipliers.
- 9. Access to credit for seed multipliers remains difficult.
- 10. Seed quality is still not optimal as a result of a lack of investments in infrastructure and equipment for seed treatment, packaging and storage. This deserves further attention in a next phase of the project.

- 11. At foundation and basic seed production level (by ISAR and RADA respectively) costs are too high.
- 12. Most project achievements depend on external financing and risk to collapse with an end to project funding.

In a general manner the final evaluation recommends are for a new project to focus on maintaining the achievements of the AFSR project and reduce the remaining seed system constraints by:

- 1. Make a single organization responsible for both foundation and basic seed production, and work on auto-financing mechanisms of this organization.
- 2. Support the organization of small seed producers, and provide them with training and support for infrastructure and equipment needed for drying, treatment and storage of seeds.
- 3. Continued support to the CC-AFSR to progressively develop into an autonomous structure capable of playing its supervising and representation roles.
- 4. Continued support to the seed quality control service in the form of capacity building and financial support
- 5. Support to the development of a seed dealer network in collaboration with other projects such as the IFDC CATALIST project.
- 6. Investigate mechanisms for financing investments in the seed sector, at all levels.
- 7. Support the putting into functioning of the conservation of genetic resources.

#### 1.2.4 SPAT II and the development of the seed sector

Programme 1 of SPAT II (Physical Resources and Food Production: intensification of sustainable Production System) provides orientations for strengthening the seed sector in Rwanda.

Supply and use of agricultural inputs (S.P 1.5.): certified seeds and other inputs (sub-programme 1.5.2. : the objective here is to increase usage rates of certified seeds with, the pillars of action being:

- a. Legal and institutional framework for certified seeds
- b. Expanded production of basic seeds
- c. Seed multiplication and distribution
- d. Promote demand for certified seeds
- e. Development of private nurseries.

The agricultural investment plan 2009-2012 computes a budget of 215,7 million US\$ for this sub-programme.

## 1.2.5 Challenges and opportunities

The main challenge at the moment is that Rwandan farmers have too little access to affordable, quality seed of high yielding varieties. In order to improve this situation the operation of the farmer based, commercial and public seed system needs to be strengthened, realizing that each system has its values and limitations in terms of availability, price and quality.

The formulation team identified a number of notable challenges for seed sector development:

- Professionalize the commercial seed producers emerging as a result of the AFSR and Root and Tuber projects. This includes making the CC-AFSR independent a more independent representing body of private seed multipliers.
- Develop clearly articulated crop specific strategies for professionalisation of the seed chains, while contributing to economic development and enhance national food security.
- Enhance the number and diversify the type of actors in the seed system who
  produce foundation and basic seed, done currently exclusively by ISAR and RADA
  respectively, to make the seed system less vulnerable.
- Separate the responsibilities for both basic seed production and quality control of basic and certified seeds, which is currently combined under the mandate of RADA seed unit.
- Secure the multiplication of all major food crops of Rwanda, including those crops for which seed multiplication is not profitable but which are crucial for national food security and farmers' livelihood.
- 6. Enhance the division of responsibilities among private entrepreneurs in the seed sector and the public institutions at national and local levels.
- Improve the interaction between the formal and the informal seed system to increase the impact of public interventions to enhance availability of and access to quality seed.

Currently however, there are also major opportunities to improve the functioning of the seed sector in Rwanda. The most important opportunities are:

- 1. Know-how and functioning of seed multiplication as a result of the efforts by the on-going AFSR and Root and Tuber projects of BTC and MINAGRI.
- 2. An overall drive and effort by the Rwanda government and its partners to intensify agriculture through the use of inputs, including quality seed.
- 3. A strong commitment of the Rwanda government to enhance professionalism and performance of the seed sector, well documented in the SPAT II.
- 4. A position by the Rwanda government to support private investment in the seed sector.
- 5. Adequate public knowledge and infrastructure for foundation and basic seed

production, with the exception of land for basic seed potato production.

- 6. An emerging class of ambitious private seed multipliers.
- 7. On-going efforts to build agro-dealer networks by IFDC and the CIP.
- 8. Recognition of the importance of both the formal and informal seed sector.

## 1.3 Agricultural Advisory Services in Rwanda

## 1.3.1 Situation analysis

## 1.3.1.1 Evolution of agricultural advisory services in Rwanda

During the colonial period agricultural extension in Rwanda was organized around export cash crops, i.e. coffee and tea. The colonial administration defined the production targets to be reached by the farmers while extension agents provided technical support. The extension agents had a role of supervision and monitoring in order to ensure that farmers realized the targets that had been fixed. After the independence of Rwanda in 1962 the national administration continued this approach while extending its support to food crops and diversifying its methods of extension. The administration still fixed the production targets while also paying attention to the organization of farmers in cooperatives.

During the 1980s and early 1990s environmental degradation (e.g. soil erosion, loss of soil fertility) gained increasing attention while donor-funded projects emerged. There was attention for natural resource management, integrated and participatory extension methods. The national agricultural extension system remained centrally steered and top-down managed. With the donor-funded projects, NGOs emerged and got involved in agricultural extension. They introduced and employed participatory methods and bottom-up systems for planning and monitoring.

After the 1994 genocide, the national agricultural extension system had to be completely rebuilt. In fact, the grassroots systems of agricultural extension agents had almost completely disappeared. In the first years of national reconstruction, other areas then agricultural extension understandably got more attention and support. Still, farmers needed access to production factors, including technologies and inputs, and with support from donors and international NGOs, national NGOs and farmer organizations put in place their own local systems for agricultural extension and advice while the public sector started rebuilding the national system.

The rebuilding of 'old' public sector though has not been completed. MINAGRI was reformed and the Provincial Directions for Agriculture and Livestock (DPAE) with their network of field agents was abolished giving place to RADA and RARDA, while in the same time the implementation of the decentralization policy gives an important role to District authorities which have their own agricultural officers. Nowadays the national agricultural extension system in Rwanda is no longer a centrally steered and managed system: NGOs and particularly farmer organizations have developed extension systems and approaches, Districts increasingly are involved in implementing the national agricultural policy while MINAGRI seeks to optimally make use of the pluralistic reality of

the field in its ambition to transform agriculture in Rwanda.

## 1.3.1.2 SPAT II and the development of agricultural advisory services

Programme 2 of SPAT II (Support to Professionalization of Producers) provides some practical orientations for strengthening agricultural extension:

- Strengthen local centers for training and sharing of experiences regarding innovation including technologies (Sub-Programme 2.1);
- Develop and promote a system of knowledge and information services through which farmers contract farmer advisors (SP 2.1);
- Establish permanent training service for extension agents (SP 2.1);
- Implement participatory research-cum-extension approaches (e.g. FFS; SP 2.2);
- Certify farmers as trainers and facilitators (SP 2.2);
- Strengthen programmes of mass extension messages (SP 2.2);
- Implement a holistic approach for both research and extension; i.e. unifying relevant entities and linking research and extension (SP 2.3).

Both the Sub-Programme 2 and the National Agricultural Extension Strategy (NAES) define key guiding principles for strengthening an agricultural extension system that allows for proximity knowledge and information services to farmers:

- Farmer participation in decision-making (demand-driven) should be organized in such a way that services are more tailored to their demands and needs and thus have a positive effect on their main economic activity, agriculture;
- In that perspective it is also essential to enhance accountability of (public and private) service providers to farmers in order to ensure effective feedback and justify public means that are mobilized for service provision;
- Since public sector agricultural service providers are no longer massively present at grassroots level, the development of a pluralistic extension system, actors as well as methodologies, is a necessity;
- In the light of the overall ambition of SPAT II to enhance the transformation of subsistence agriculture to a more market-oriented agriculture, agricultural extension and advisory services should enhance market orientation of agricultural producers.

# 1.3.1.3 Diversity of actors and approaches in agricultural advisory services

Nowadays the agricultural advisory system in Rwanda *de facto* is a pluralistic system that is characterized by a diversity of actors and methods. Four sub-systems can be distinguished.

First of all there is, the country-wide, public sector system with the MINAGRI implementing bodies of RADA and RARDA and more important the District and Sector agronomists. The services they provide are organized around the priority crops that have been identified by the Districts in line with the national policy. In practice however their role is limited to planning and monitoring which makes that the system is perceived by many farmers as 'top-down'. Services focus on support for accessing technologies and agricultural inputs. In fact, technologies are often embedded in the services for accessing seeds and fertilizers. A key actor in the public system is the MINAGRI Crop Intensification Programme (CIP) which in turn contracts service providers (e.g. NGOs and producer organizations) to deliver input services. The system is financed by the government and donors as part of the emerging sector-wide approach in the agricultural sector.

MINAGRI is currently preparing for a structural reform to become the Rwanda Agricultural Board (RAB). As far as agricultural extension and advisory services are being concerned, this organization presents two institutional innovations: it integrates research (former ISAR) and extension (former RADA/RARDA), which allows for enhanced linkages between research and extension, and deploys more staff at the Zonal level, which allows strengthening the links between policy making at the central (Ministry) and policy implementation at the decentralised level (Districts).

Rwanda has a long tradition of farmer organization and farmers, men and women, organizing themselves for accessing production factors (e.g. seeds, inputs, technologies) and agricultural output markets. A national policy and agency (Cooperative Agency) have been put in place to support farmers in their efforts to organize themselves in Cooperatives (grassroots cooperatives, local unions and national federations). The cooperative model is being promoted as *the* model for organizing access to input and output markets. During the last two decades local advisory systems have been put in place by producer organizations (e.g. INGABO, IMBARGA).

The latter is a second sub-system that emerged in the aftermath of the 1994 genocide when agricultural services where practically absent at the grassroots level. Producer organizations employ specialized, technical staff, which organizes and delivers advisory services, in combination with trained farmers who become farmer extension workers. Farmer-to-farmer advice approaches vary from one situation to another while adapting to the local situation. This makes that the system is embedded in community institutions and supported by farmer groups at the grassroots level. Services address an array of issues while there is a trend to organize services around supply and value chains of food crops and animal products (e.g. maize, cassava, milk). Such systems receive financial support from donor partners of the producer organizations. Increasingly cost-sharing by service users is integrated which works quite well within sub-sectors that are linked to promising and beneficial markets and evolve toward value chains. User fees allow for cost-sharing

of service provision and evolve with the performance of the 'value chain'.

Thirdly, donor-funded projects, international and national NGOs are also involved in agricultural advisory services. Many projects contract local service providers including RADA, RARDA, and often local NGOs and producer organizations, to deliver input and advisory services in particular areas of the country or fields of development. They often use integrated, participatory approaches that combine territorial (soil and water management) and value chain (production and processing) approaches. Examples are the IFAD and Government co-funded PAPSTA and KWAMP projects which target specific areas (KWAMP: Kirehe District; and PAPSTA: pilot zones of Nogororero, Gakenke, Nyanza, Bugusera, Nyamagabe and Kirehe). Another example is the FFS project that is being funded by Belgium and implemented by BTC (see chapter 1.3.1.6). Service delivery is entirely funded by donors although cost-sharing mechanisms are being proposed. This is a key difference with the second sub-system where cost-sharing mechanisms are developed and implemented by the local actors themselves that could lead to a local service market. Donor-funded service delivery using outsourcing mechanisms may however lead to a donor market for service delivery that does not reflect the purchasing capacity of the service users, smallholder men and women farmers.

A fourth, emerging sub-system doesn't focus on advisory services as such but considers it to be part of a service system network which includes other support services such as research, credit and business development. Service providers are members or facilitators of 'platforms' that are organized around specific crops or covering specific territorial areas. Examples in Rwanda are the DfID funded Research Into Use (RIU) programme that facilitates the formation and functioning of four innovation platforms (maize in the Nyagatare District; cassava in the Gatsibo District; potato in the Gicumbi District; and agro-processing and marketing in the Karongi District); the IFDC Catalyst project funded by the Netherlands that facilitates the formation of so-called agribusiness clusters through which agricultural input and output marketing as well as support services are being strengthened and coordinated; and the Dutch AgriProFocus Initiative for Promoting Rural Entrepreneurship (IPER) facilitates and supports some 15 platforms in Rwanda around honey, maize, wheat, rice, cassava, and Irish potato. Besides the role of coordination of service provision and linking of service providers around specific, common interests and objectives, these platforms also have a function of learning-by-interaction which is considered to be essential in agricultural innovation.

In this light, it should be noted that the role of the District Joint Action Development Forums (JADF) will also be strengthened. The JADFs are multi-stakeholder platforms that plan, coordinate and monitor service provision in the District. The JADFs are an opportunity to strengthen demand-driven, proximity agricultural extension and advisory services and facilitate learning-by-interaction at the District level for effective agricultural innovation.

#### 1.3.1.4 Diversity of farmer situations

Agriculture in Rwanda is dominated by smallholder farms, which could be differentiated according to three possible criteria:

- 1. According to agro-ecological zones (3 major zones in the country: Low, Middle and High Altitude Zones);
- 2. Socio-economic situation (6 groups according to food self-sufficiency, land, cattle, source of income and savings: the 'destitute', the 'very poor', the poor and self-sufficient', the 'poor and able to save money', the 'rich and self-sufficient' and the 'rich and able to save money'<sup>4</sup>):
- 3. Access to markets (3 possible situations: access to international markets; access to local markets; and no access to markets).

There are thus potentially 54 different target groups (3 x 6 x 3) and 36 target groups when excluding access to international markets. Gender equality is another criterion for further distinguishing groups that differ in terms of assets. 28% of the Rwandan rural households are headed by women and may require specific focus from extension services in order to assure they benefit equally from improved agricultural advisory services.

Experiences show that markets are important triggers for agricultural innovation; e.g. the innovations that are been observed in the cassava and potato sub-sectors in Rwanda, two commodities for which there is a growing, urban demand. Furthermore, services provided to farmers in such promising sub-sectors are increasingly provided on a cost-share basis (see chapter 1.3.1.3). Therefore agricultural extension also seeks to link with other support services that allow for enhanced access of markets and the subsequent asset strengthening of smallholder farmers.

Contributing to enhanced food security remains an important objective for agricultural advisory services. Practice learns however, that opportunities for improved market access and subsequent household income generation do result in higher adoption of new technologies and participation by producers in innovation and training processes than in cases of services that only focus on increased food security (production orientation). Raising income allows rural households to improve their food security status as well as access to other primary needs such as health services, education etc. and thus contributes to improved livelihoods.

The NAES defines agricultural extension services as the "dissemination and exchange of information between farmers and farmer's organizations with the objective to build capacities of producers to maximize the use of resources they have and to improve, through the adoption of innovations, their economic and social standings". Farmers, men and women, though are differently endowed in "resources" and thus follow various pathways to "maximize the use of (their) resources". An effective use of knowledge and information provided by agricultural extension services is particularly determined by the socio-economic situation of farmer households (risk taking behaviour and investments

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<sup>&</sup>lt;sup>4</sup> Government of Rwanda, 2002. Poverty Reduction Strategy Paper.

opportunities) and their access to markets (improved incomes for allowing investments).

It is therefore essential for impact-oriented extension services to differentiate target groups according to their specific agro-ecological and socio-economic conditions, as demonstrated above. From the start of the programme it has to be made clear what the specific target groups of the project are, and how these different target groups will be able to benefit from the initiatives deployed by the programme. As such it must be kept in mind that when market-orientation is mentioned as an important criterion for decision-making in resource allocation by the programme, that this is focused on rural household income generation aimed at livelihood improvement. This is different from the macro-economic objectives of increasing Rwanda's gross domestic product or trade balance.

## 1.3.1.5 PASNVA project

The PASNVA project has piloted a system of decentralized agricultural extension in 11 of the 30 districts of Rwanda.

The Mid-Term Review (MTR) of the project, conducted in October 2009 holds important input for the formulation of the new programme:

- 1. District platforms. The district agricultural extension platforms have developed into important bodies for both the project itself as well as for the district administration and specifically the agronomists at district and sector level. However, there are a number of flaws in the set-up of the platforms that require attention. The most important problem observed is the confounding roles of the different actors in the decentralized extension system. The role of private service providers is weak, the platforms take on too many responsibilities, and the district administration does not have the staff and capacity to fulfill the tasks that would logically be theirs. This requires to readjustment before scaling up the approach to the whole country.
- 2. Centre for Agricultural Information and Communication (CICA). CICA has been established and gathers key information that is being consulted by national actors. Still links with and service to local agricultural advisory service providers remains limited. CICA's potential could be fully exploited when giving it a role of back-up service to agricultural advisory service providers in a decentralized, pluralistic service system. It can develop further into the centre of knowledge on design of effective training and communication services, and monitoring the effect of extension efforts. It would have to provide service to the zonal RAB offices where the most important technical know-how will be present in the restructured MINAGRI.
- 3. Non-public service providers. The extension approach promoted under PASNVA and documented in the NAES gives much importance to the role of non-public service providers. However, under PASNVA the non-public service providers have not received ample attention and mandate. More focus is required on facilitating the build-up and capacity strengthening of a group of specialized extension service providers.

- 4. Participatory extension capacity. The large majority of actors has a limited understanding of demand-driven and participatory approaches. There is strong preoccupation with production planning on behalf of producers, which, in spite of the good intentions, does not create an environment in which agriculture can develop through innovation. A major mindset change is needed to assure that agricultural extension is seen as more than top down delivery of technical advice. It must be recognized that agricultural extension is a profession and part of a service system that enables agricultural innovation. To achieve such a mindset change more interaction at district and field level is required. Only through observing and learning-by-doing and learning-by-interaction can the capacity of local administrators, public extension staff and non-public service providers be improved.
- 5. Micro-projects. Micro-projects have assisted in the capacity building of new service providers, in solidifying the district platforms by giving them purpose, in experimenting at grassroots level with new technology, and in the delivery of extension services at grassroots level. However, the impact of the micro-projects seems limited to the direct recipient of the micro-project. Under a new countrywide programme criteria for use of funds at district level require to be reviewed.
- 6. In-build learning. In general it can be observed that the starting point for the PASNVA was difficult. There was no extension system to speak of, and more importantly there was, and still is, a limited understanding of the concept of agricultural extension among all actors, from producers to high-level policy makers. The last project year should specifically be used to document lessons from the pilot intervention, and make adjustments to the approach, before scaling-up to a countrywide program. Also in a new programme a specific component for documenting lessons is needed as the process of developing a decentralized extension system is not finished at the end of the PASNVA project, but is a continuous process, and requires continuous reflection and adaptation.
- 7. Gender disaggregated data. Finally, the project must collect gender and other socio-economic disaggregated data on beneficiaries of the project, and as part of the learning lessons component, consider what specific action can be taken in a new programme to assure women and youth are proportionately involved in decision-making and as recipients of proximity extension services.

## 1.3.1.6 Integrated Pest Management Project

In January 2008 the integrated pest management (IPM) project was officially launched. The IPM project uses the Farmer Field School (FFS) method for building capacity within the national agricultural system on integrated crop management, and thus actually goes beyond pest management alone, but tackles crop husbandry in an integrated manner.

The methodology is based on a number of steps:

1. Development of a farmer field school curriculum, making use of the outside experience of master trainers.

- 2. Intensive training of trainers.
- 3. Start of the first FFS by each trainer under intensive supervision (cropping cycle 1).
- 4. Implementation of routine FFSs by the trained facilitators (from cropping cycle 2).
- 5. Selection of second line trainers from graduated farmers, who will receive a light training of trainers course, and start their own FFSs under supervision of the first line trainers (from cycle 2).

The currently on-going farmer field school project has initiated FFSs for potato, banana and maize.

The FFS methodology does have a number of important assets for use within the context of the building of a functioning agricultural extension system in Rwanda:

- 1. It has a strong focus on the development of training capacity by individuals, who can become the extension service providers that are currently scarce in Rwanda.
- 2. The methodology has a well-developed structure that can result, provided it is executed well, in a multiplier effect, reaching significant numbers of agricultural producers.
- 3. The methodology allows for, if executed well, cost-effective training of those agricultural producers that are motivated to learn.
- 4. The methodology demonstrates clearly to producers as well as facilitators / trainers the effectiveness of practical field work, collaboration, interaction and networking, in contrast to top-down transfer of technology.
- 5. The groups of farmers that have been trained through the FFS methodology provide a network of agricultural producers that is essential for future demand articulation for services, delivery of additional less intensive refresher courses, and stepping stone for marketing of products and participatory research efforts.

As such the experience of the FFS project is essential for the success of the new programme. A number of points require specific attention in the new programme:

- The FFS approach must be institutionally embedded in MINAGRI, where it is currently run as a separate project, as well as in the national agricultural extension system where it is one of the approaches being used. As a separate project it does have advantages in terms of efficiency and speed, but does not contribute to the mindset change regarding agricultural extension that is required in the Rwandan system.
- It is critical to assess the costs of the current approach per farmer trained, and economize where possible, based on the experience of trainers and coordinators, to maximize the impact per money spend.
- 3. It has to be studied how FFS facilitators can best be remunerated for their efforts in a durable manner, so that it can become a profession rather than a voluntary effort. In an ideal situation the facilitators would be paid for their services by their clients, the farmers. In the context of Rwanda however, this is currently still difficult to achieve considering the cash shortage of the most vulnerable producers.

4. In the light of the two preceding points, it is also important to consider how the FFS approach can link and eventually integrate the systems put in place by producer organizations (see ch. 1.3.1.3. Currently efforts are being made by the FFS project to involve producer organizations and this requires critical joint reflection on adaptations to be made to the various systems and approaches.

## 1.3.2 Challenges and opportunities

The formulation team has identified the following major challenges to be addressed by the support to the national agricultural extension and advisory services:

- Enlarge the outreach of extension and advisory services through the enhanced articulation of demands and the increased use of non-public (private) service providers in responding to the demands;
- Reinforce the Agricultural Development Platform of the Joint Action Development Forum (JADF) as a sub-platform that orients and coordinates service delivery to farmers, their organizations and other actors in the agricultural sector;
- Strengthen the role of the RAB Zone structures in supporting JADF and service providers in delivering quality extension services;
- Continue to build the capacities (skills) of public and private service providers to provide tailor-made services and become accountable to their clients and users:
- Enhance the financial sustainability of provision extension and advisory services that are mainly financed through public funds (Government, donors, NGOs etc.);
- Avoid undermining local, promising systems of cost-sharing by users of service provision (e.g. the cost-sharing mechanism put in place by Cooperatives and Unions).

In order to address these challenges, the support programme seizes the following key opportunities:

- The NAES has been largely disseminated (workshops, brochures etc.) and has become the policy reference at all levels;
- District platforms for agricultural extension are functional in 11 Districts; they
  provide some interesting lessons learned for the future support programme;
  e.g. taking up too many tasks affects their performance and outreach of
  extension, and micro-projects (PASNVA funded), which link technological
  innovation to markets, have a limited outreach;
- The pool of FFS facilitators is a promising start of a trainers-of-trainers network in participatory extension and research;

- Equally, technical staff and farmer extension workers of the Unions,
   Cooperatives etc. form another potential pool for strengthening the network of private service providers;
- These producer organizations provide some interesting and useful insights on possible cost-sharing of service provision and the evolution toward a more financially sustainable system of service provision;
- CICA has developed extension material on technologies for the major crops and cross-cutting themes in smallholder farming; this can be linked to service delivery in the Districts; e.g. demonstration and training.

## 1.4 Gender and Agriculture in Rwanda

## 1.4.1 Woman among the most poor

The table below shows that 85 % of women are employed in the agriculture sector. Women are mostly concentrated in subsistence agriculture (79.6%). These figures suggest that women produce food crops for day-to-day survival and local consumption. Regarding exports, there seems to be a weak participation of women in export production (coffee and tea) where only 25% of producers are women.

The distribution of land ownership, which serves as a guarantee for loans and credits, indicates important gender inequalities, having a significant impact on access to financial and social resources such as bank credit, market, social empowerment and recognition.

Table 4: Percentage of women in the agricultural sector

Areas	% of women
Agriculture	85,00%
Subsistence agriculture	79,60%
Land holder	10,6% against 21,27% for men
Coffee and tea production	25% women against 75% men

Source: DHS, 2005

## 1.4.2 Medium and large scale enterprises

Rwanda's formal private sector is small, estimated at 400 large private companies in the country, of which 50% employ less than 50 workers. There are about 3,000 formal (registered) firms. The exact number of firms owned by women is not known, a few women entrepreneurs have ventured as owners and managers of successful businesses. Major constraints in this sub sector are the following, hampering full participation of women in the private sector:

- Poverty scale among women is higher than for men;
- Illiteracy among women, few women engaged in business; difficulties to introduce proper project proposals; lack of familiarity with official instances and services;
- Difficulty of obtaining guaranties for loans, access to credits;

The opportunities and challenges in this sub-sector are:

- Proximity to and good relations to local administration, local authorities and extension services;
- Recently many new recruited agronomists are women, supportive to women initiatives

#### 1.4.3 Women and extension services

The main constraints that can be detected are:

- Poverty and gender roles are hindering facilitation of the promotion of women rights, particularities of women not sufficiently addressed.
- There's no institutional arrangement to study, analyze or address women problems in the extension services and there is a lack of access to information because of weak capacities of women.
- The (new) extensions staffs (agronomists and veterinaries) do not interact
  with women to discuss and address women issues in the agriculture sector.
  The extension service support is without capacities to integrate gender in
  their approaches. Women are under-represented in extension programmes.
- Illiteracy and lack of participation in decision-making cause difficulties to interact with district authorities (registration of their associations, problem solving, ...), difficulty of access to partners operating at national level in order to benefit from their support.
- Lack of capacity to prepare and submit good proposals to the platforms. Women on village level are still in associations and not in cooperatives.
- Networking facilities are limited reducing the effectiveness of agricultural platforms.
- Service provision to woman is not a priority for agronomists at the District level.

## 1.4.4 Women involved in the seed production

Women involved in seed production have similar constrains as men. It is therefore not the purpose to separate the focus, it is however important to highlight the problems women in the seed producing system are facing in a structural way, probably in a more explicit way

than men. These structural obstacles for women's involvement in the program justify specific actions oriented toward their empowerment.

Following structural obstacles can be stressed:

- Lack of input: basic seeds, fertilizers, technical knowledge and equipment;
- Access to income, markets, credits, loans, land and decision-making structures, hinder full participation of women in all production processes.

## 1.4.5 Challenges:

- Ensure that both women's and men's access to agricultural finance is enhanced. Facilitate women's access to financial support (loans, grants) and other means that can facilitate their activities (transport to sell their productions, processing machines,...)
- Facilitate the access to agricultural inputs (fertilizers, seed,) and markets, through specific activities addressing specific target groups. Enhance both women's and men's access to markets through improved communication facilities, permitting women to participate (taking into account their illiteracy). Provide capacity building and training for women on how to write good proposals (sometimes on a more basic manner than provided for men's groups). Strengthen women's and men's capacities to design and manage agricultural transformation activities for market oriented production.
- Provide specific study tours, capacity building activities and Fora so that women's initiatives can be formalized, assessed and taken into account.
   Transmitting information about income generating activities
- Facilitate women's access to technology with respect to their implication in agri-business and seed production business. Facilitate women to engage in the seed production business (certification). Provide specific awards for women.
- Ensure that women and men agriculturalists are guaranteed minimum security for their produce. Ensure women and men's capacity to preserve and store food surplus and ensure that women and men have the necessary facilities for efficient food distribution.
- Strengthen women's and men's agricultural cooperatives aimed at improving their economic returns. Promote private and public sector partnership aimed at creating markets for women's products in the seed sector. Facilitate and support the enhancement of rural women's entrepreneurial skills.
- Facilitate women to engage in the processing of the agricultural and livestock products in order to add value to their products and gain more in the business. Enhance both women's and men's level of competitiveness with regard to value addition and standardization. Ensure that rural women's

- products' are given greater value through quality improvement of their products and skills development.
- Ensure that gender awareness is sufficiently elevated among decision makers, implementers and communities. Support advocacy and lobbying at different levels in favour of female-headed service providers, associations and cooperatives. Ensure gender sensitive representation and effective participation of women and men, girls and boys in decision making, at all levels.
- Ensure training in analysis and planning skills within public, private and civil society organizations for effective and systematic gender mainstreaming in all policies, programmes and projects at all levels.

# 1.5 Belgian and other cooperation in the agricultural sector

MINAGRI's work and internally financed projects are supported and complemented in its efforts to achieve its priorities by the following externally-financed projects:

Table 5: Belgium and other main donors projects and programmes

Project	Donor	Counterpart	Loans	Grants	Total
		funds (GoR)	RWF	RWF	RWF
		RWF			
PAIGELAC	AfDB	200,000,000	5,874,003,355	122,650,000	6,196,653,355
LWH	IDA	650,000,000	2,772,510,652	-	3,645,561,652
	USAID		-	223,051,000	
PADAB	AfDB	250,000,000	-	3,900,000,000	4,150,000,000
PAIRB	AfDB	80,000,000	-	1,314,259,000	1,394,259,000
RSSP	IDA	400,000,000	4,496,122,625	-	4,869,122,625
APEL	Bel.	-	-	1,451,546,400	1,451,546,400
IPM	Bel.	-	-	800,000,000	800,000,000
Roots&Tubers	Bel.	-	-	800,000,000	800,000,000
PASNVA	Bel.	-	-	295,287,740	295,287,740
APFH	Bel.	-	-	1,661,380,800	1,661,380,800
PAPSTA	Bel	100,000,000	-	747,500,000	4,816,173,180
	DfID		-	491,050,000	
	IFAD		1,816,242,380	-	
KWAMP	IFAD	600,000,000	-	3,698,572,500	4,298,572,500
PDCRE	IFAD	140,000,000	1,579,229,860	-	1,719,229,860

Source: Strategic Issues Paper June 2010 – July 2011

APEL (Appui au Petit Elevage) is a livestock project implemented by RARDA in five districts. The project has an extension component as well as activities to improve forage crop. Cooperation with Karama ISAR Station is foreseen.

APFH (Appui à la Filière Horticole) the project is implemented by RHODA. Its objective is the intensification, the organization and the diversification of the horticultural production value chain as to fulfill the local and external markets.

## 2 Strategic orientation

## 2.1 Implementation Principles

The programme will have as the basic principle that it supports the implementation of the SPAT II. The support programme will, in close consultation with decision makers in MINAGRI, be embedded in the policies and procedures of MINAGRI (alignment principle) in order to enhance full national ownership. As such the programme should contribute 100% to the SPAT II.

This corresponds to a desire by both MINAGRI and BTC to improve the embedding of collaborative projects in the general implementation efforts by the Ministry. To assure this a programme approach is needed, which constitutes a change from the current project implementation mode used by BTC and MINAGRI. Specifically the role of technical assistance in the Belgium-Rwandan cooperation in agriculture will change and become more focused on capacity strengthening and general quality improvement in execution of the MINAGRI programmes, and less on project implementation and administration.

Compared to on-going and past projects undertaken by BTC and MINAGRI, more emphasis will also be placed on gender and diversity through the use of gender and asset class disaggregated data in monitoring, and the assurance of the representation in decision-making bodies, as well as representation among beneficiaries of women and vulnerable groups. In all capacity building exercises parity in numbers of men and women is strived after. Quota will be applied where relevant.

There will be a specific result focused on learning during the process of implementation. A Monitoring and Evaluation system that facilitates documentation of lessons learnt and experiences will be set-up. This will be used for pro-active and reactive programme management and for readjustment and adaptation of activities according to insights gained.

The programme seeks to align with the forthcoming restructuring of MINAGRI, as well as the decentralized governance model. As such the programme will seek to place responsibilities at those levels where the Rwanda Government has decided to place executing power (subsidiarity principle). This means that the main implementation will be done from district level, and that support to this implementation will be centered at the zonal offices of the Rwanda Agricultural Board, that are to become operational in the near future and at least before the initiation of the new programme.

The programme will focus on building the capacity of the restructured MINAGRI and specifically the national and zonal RAB offices. Specific long term and short term technical assistance is foreseen in the programme to improve the Ministry's capacity, based on the principle of filling a temporary need. For structural human resource needs, which can currently not be fulfilled by MINAGRI itself, a limited number of temporary staff can be recruited by the Ministry, using programme resources, with the understanding that by the end of the programme, those staff would be absorbed on the MINAGRI payroll using its recurrent budget.

Following the advice and strong wish of the Rwandan administration, the programme will

not limit itself to certain zones or pilot areas, but the programme will be implemented country wide, avoiding bringing benefits to only a pre-selected sample of the countries population. Therefore the formulation team has made some strategic choices in order to avoid a too large list of activities, which would make countrywide implementation unpractical and unrealistic. The most important strategic choices are:

- Limit advisory services in this programme to knowledge and information, and not include the provision of agricultural inputs as part of the extension system.
- Re-center the role of the agricultural extension platforms on a light and focused package of tasks, avoiding the need for important resources to run the platforms.
- Embed all programme activities into the reformed structure of MINAGRI and the decentralized government system.
- Use all existing forms of producer organization and advisory service providers, in line with the NAES.
- Halt the implementation of micro-projects that have shown limited impact.
- Discontinue the support to the organization of sector level platforms, cellule level committees and Umudugudu focal farmers proposed under PASNVA and in the NAES as this cannot realistically be achieved, nor can it be maintained. Furthermore it is not required for demand articulation by producers, nor should it be expected to become an extension service delivery mechanism.
- Focus on the FFS methodology as the most important building block of a countrywide effort to enhance capacity for the production of marketable crops.
- Limited investments in public infrastructure and equipment but optimizing the use of the currently existing infrastructure.

The programme works from a demand driven principle. As such specifically initiatives in advisory services, but also action for supporting the seed sector will be steered by the demand of the final beneficiaries, the male and female farmers, of all asset classes, of Rwanda.

Another important principle, which to a large extend will be fulfilled by being truthful to the principle of demand driven priority setting, is the focus on economic development and market opportunities. Both in the seed components as well as in the advisory service components income improvement is a major objective. As such both seed and advisory services will contribute to the market orientation of smallholder farmers.

The programme's major objective will be sustainable system building. The programme will focus on the building of improved systems of seed production, marketing and use and an improved agricultural advisory service system. The improvement of these systems will have an impact that goes beyond the duration of the programme. Although the programme will assure sizeable direct capacity building of both seed producers as well as

crop and livestock producers, the major impact on the agricultural sector, and through that on the Rwandan economy, will have to be obtained through the value added as a result of system improvement. The programme will seek to create and reinforce the functional linkages between agricultural research, the seed sector and the agricultural advisory service system. Producer organizations are recognized as essential actors in all these areas. They already provide services in these areas, and the programme will build on this and seek to improve the quality and outreach of these existing efforts.

Ultimately the programme looks to develop seed and advisory services that are pluralistic, provided by a multitude of actors, for the diversity of farmers that require these services. The programme will reinforce public services, private services, services provided by producer organizations, services provided by NGO's or by any other actor active in the field. As such no choice is made between different preferred actors, rather the contribution of the diverse service providers is acknowledged, appreciated and will be reinforced.

### 2.2 Guiding principles for Seed Sector Support

#### Differentiate between different seed sub-sectors

It is essential to differentiate between different crops when deciding on the interventions necessary to improve the use of quality seed. Different crops have completely different needs and opportunities in terms of seed sector development. Through differentiating between groups of crops with similar opportunities more targeted and effective interventions can be developed. Six groups of crops have been distinguished:

- 1. Local vegetables and forage
- 2. Fruit crops
- 3. Cassava, banana, sweet potato
- 4. Grains & pulses
- 5. Potato
- 6. Temperate vegetables and hybrid maize

### For each of these groups a sketch of a strategy has been proposed in Annex 7.8.

Fruit crops are currently under the mandate of the BTC assisted APFH project within RHODA and close alignment will be looked for with this project. The new programme will have to be prepared to continue essential activities of this project once it ends.

Furthermore linkages will be sought with the Belgian funded livestock support project (APEL) in the field of seeds for forage crops.

#### Professionalization of the seed sector

The leading principle of the strategy employed by the program to improve the use of

quality seed is the professionalization of the seed sector. Both the public as well as private actors can improve further on the quality and efficiency of the services they provide in the seed sector.

# Support the development of private sector involvement in the seed sector wherever economically feasible

Each different group of crops has its own opportunities for private sector involvement in seed production and marketing. For each group of crops a specific division of tasks between private sector and public actors will be proposed. There where seed chain activities can, in a durably profitable manner, be taken up by private entrepreneurs, the public sector needs to withdraw and allow for, and even stimulate, the development of these private entrepreneurs. Also small-scale seed producers who multiply seed for profit are considered as private entrepreneurs.

The division of tasks between public and private actors will be defined for the entire seed production chains, starting at the level of conservation and use of plant genetic resources, participatory variety selection and ending with the diffusion or marketing of quality seed. Ultimately it is desirable that for most of the steps in the multiplication there is a number rather than a single actor sharing responsibilities in a structured manner. This reduces the risk of stagnation as a result of the non-performance of a single actor, and provides some incentives for the competing actors to improve their services to their clients, and the efficiency of their production.

# Government will focus on those tasks that cannot be run profitably by private entrepreneurs

The Rwanda government will improve its focus and the use of its financial and human resources on those tasks that are essential for functioning seed chains that cannot be fulfilled through the private sector. Germplasm conservation, variety selection and foundation seed and basic seed production of less popular crops will remain an important task of the Rwanda government.

Furthermore the Rwanda government will have an important task in assuring that there is legislation that is crop specific, realistic and adapted to the needs of the end users of seeds. The government needs to support quality control systems that are serving the interests of the end users of seeds, and which promotes the availability of affordable quality seed.

# Introduction of auto-financing through revolving funds for routine multiplication tasks taken on by RAB

An important principle for the building of a durable seed system is that also those functions that will be fulfilled by public institutions will be billed to the user of these services. Revolving funds managed directly by those responsible for these routine multiplication tasks can assure that resources are available in a timely fashion and are

used in a transparent and efficient manner for continuous routine production.

This does however require a good costing of the foundation seed produced. Furthermore it is essential that all users of this seed pay for the cost of production, to replenish the revolving fund.

Direct subsidy of consumables for foundation seed production must be avoided. Consumables for routine production should come form the revolving funds and be replenished by the users of the seed produced. Not only if this user is a private company, but also if this user is from within the same organization (RAB), or if the user is a project or programme (for example the Crop Intensification Programme).

This will diminish the direct dependency of the publicly run seed production of donor and state funding, and assist in running those routine seed production tasks taken on by RAB in a professional, continuous and cost effective manner.

For example, if foundation seed is being used for research purposes, this should not be provided for free to the research unit uses the basic seed, but it should be charged to the specific research project, to replenish the funds of the foundation seed production unit. If public funding is available to subsidize foundation seed for research, or basic seed for the Crop Intensification Programme (CIP) for example, this should not be provided directly to the RAB units producing the seed, but only as payment for the seed itself, to replenish the revolving fund.

At the same time it can be justified that the Rwanda government support the execution of seed production tasks taken on by RAB through the use of facilities and making available staff. It is important however to only subsidize in this manner those tasks that cannot be fulfilled by private entrepreneurs. However, the more the routine production depends on this government support, the more it is vulnerable for fluctuation in availability of public funds.

#### Focus on economically important food crops

The main focus will be on improvement of the quality seed availability and use of marketable food crops. The amount of resources that will be invested into the improvement of the seed system of a crop or group of crops, will be a function of the priority given to the crop by producers, the economic value of the crop or group of crops, and the specific value for poor farmer households and women.

#### Functional linkages between formal and informal seed production systems

In line with the national seed policy no choice is made between the support of informal or formal seed systems. For each group of crops a balance will be struck between investments in formal certified seed production and improving informal seed production. The guiding principle for this balance is to make affordable quality seed available to producers.

Certification and quality control systems are seen as a possible mean to achieve this, but not as an objective in itself. More often than not the certification system as such has

become the primary focus of seed system projects. Seed certification and effective quality control within the certified seed system are an essential component of commercial seed systems. They are however not the single simple answer that assures quality seed for producers. For this a functioning certified seed system, combined with a functioning informal seed system is required.

It is highly dependent on the economy of specific a crop whether the use of certified seed by farmers is profitable. Furthermore, even if the use of certified seed by producers is profitable, it is possible that the production of this certified seed cannot be done in an economically attractive manner by a private seed multiplier. For each separate group of crops a specific balance will be found between investing in strengthening certification services and support to the development of informal seed multiplication, with or without a quality control system initiated by the project.

# 2.3 Guiding principles for Agricultural Advisory Service support

This programme is the continuation and consolidation of ongoing support by Belgium to agricultural extension and links it with support to the seed sector. The programme primarily aims for scaling up and enhanced outreach through institutional development, organizational strengthening and human resource development. Based on the situation analysis in chapter 1.3, the following principles have been identified.

#### Market-orientated agricultural advisory services

In line with the overall goal of SPAT II, the agricultural extension and advisory services will be market-oriented, i.e. they will contribute to the transformation of subsistence-based farming toward market-oriented farming. This means providing services to farmers, livestock keepers and their organizations for improved practices and management of production, processing and marketing of marketable, agricultural products which enhance income generation and rural entrepreneurship.

The support programme will particularly focus on the strengthening of 'advisory services'. Extension refers to the supply of undifferentiated information and messages to all farmers while advice implies analyzing demands and providing information or training that targets particular groups and the specific constraints they face. Therefore, in the frame of this programme, 'advisory services' is considered to be a more appropriate term that doesn't include input supply (seeds, fertilizer) and financial (credit) services as such.

In order to make agricultural advisory services 'market oriented', demands for advisory services need to be analyzed while taking in account market opportunities and conditions for agricultural and livestock products, and service delivery needs to complement other essential services such as agricultural input and credits. Therefore the programme, through its support to building the system, will particularly support and facilitate 'platforms' at different levels where actors meet, exchange and coordinate their activities for agricultural development.

### Reinforcement of institutional capacities to articulate and analyze demands for services

Demand-driven services go beyond the simple registration and acceptance of demands by farmers. It requires the analysis of the context, farm households and their resources as well as market opportunities. This is particularly the role of the District Agricultural Platforms, which will be initiated as sub-committees of the JADF countrywide in analogy of the platforms piloted under the PASNVA project. The support programme will strengthen the platforms' capacities and mechanisms to effectively assess needs for services, orient service providers, coordinate efforts and assess advisory service quality delivered to farmers and producer organization. Hence it contributes to the institutionalization of a demand-driven, accountable, pluralistic system of proximity advisory services.

#### Strengthening of the organizational capacities for the supply of services

The supply capacity of market-oriented agricultural advisory services is still limited. Many projects do fund and supply such services without their sustainability being guaranteed. Furthermore, producer organizations and FFS trainers provide a potential network of services providers with a variety of actors and approaches, and thus stimulating and enhancing innovation. The support programme will therefore invest in the capacity building of a pool and network of sustainable non-public service providers while using the diversity of approaches as an asset. The sustainability question requires the definition of criteria for the selection and monitoring of service providers as well as a particular attention for sustainable financing of services (e.g. on a cost-sharing basis).

#### Establishment of a resource base for strengthening the supply of services

The provision of targeted services (commodity sub-sectors, men and women farmers etc.) requires an array of methods and tools for training and information, which go beyond the simple fact sheets on agricultural production, storage and processing technologies. Didactic attitudes and skills as well as guidelines for developing and using training and information material are of utmost importance. Furthermore, the priority value-chains and commodity sub-sectors require the availability of reference material as well as its timely update according to new insights gained by agricultural research. The support programme will assist CICA to become a coordinating and resource center for capacity strengthening in market-oriented agricultural advisory services. The programme will particularly support the development of technical reference and didactic materials, the links with public and private service providers to which CICA will become servable, and links with agricultural research for the input of technological innovations.

### 2.4 Guiding principles for a gender approach

#### A gender mainstreaming and a gender specific approach

The integration of the gender dimension in the present programme includes a transversal and transformational approach (gender mainstreaming) as well as a gender specific approach reducing existing gaps for example with respect to women's participation in seed production or access to loans for new initiatives.

Following principles will guide the gender mainstreaming approach:

- 1. Gender specific baseline study at the beginning of the programme
- Gender specific planning, taking into account the impact of differing gender roles and gender needs of both women and men. It involves the selection of appropriate approaches and their entry points to address women and men's practical needs, and to challenge gendered inequalities.
- Gender sensitive implementation: the transversal approach is reflected in each result, where all activities will be executed in a gender sensitive way, where appropriate.
- 4. Gender specific budgeting (will be clarified at the beginning of the programme and submitted as part of the action plan to the Steering Committee).
- 5. Gender specific monitoring and evaluation (during annual report, during MTR, final evaluation).
- 6. Provide systematic assistance during the implementation of the project and strengthen the available resources on gender at MINAGRI.

These principles will guide the **gender specific approach, which is inherent of the participatory approach,** enable the detection of inequalities and possible discriminations, among women and men, but also among other vulnerable groups within society.

Take into account different social and cultural tissues, determining the relations between vulnerable groups:

- 1. Verify similarities and differences from region to region and adapt methodology for participatory research and interaction with farmers;
- 2. Detect inequalities and discriminations, these can occur on the level of access and control over representation, resources, working and living conditions and identification of future realisations (needs, competencies, interests,...);
- 3. Integrate measures during planning and monitoring, to reduce these inequalities and discriminations, refer to national regulation and legislation;
- 4. Provide training and capacity building where needed, in order to inform stakeholders and project staff on inequalities and discriminations and regulation and legislation;

5. Avoid creating new inequalities and discriminations during planning of activities, monitor possible risks

#### 2.5 Beneficiaries

The ultimately targeted beneficiaries of the programme are rural households engaged in agricultural production. These beneficiaries will profit from the project efforts through 2 different pathways. In the first place they will benefit through the availability to them of quality seed for marketable crops. Furthermore they will benefit from an improved access to agricultural advisory services of a higher quality and enhanced responsiveness than in the current situation. The combination of these 2 improvements will result in a yield increase, and a reduction of production risks. This in its turn provides them with a higher marketable surplus and an increase in household income. Through the increase in household income food security, access to healthcare, education, quality of housing and clothing will increase and result in an improved livelihood.

The benefits for the landless rural population of this initiative are limited. Through economic development that becomes possible as a result of higher surplus production more rural jobs in processing activities and the support services may develop, which is of indirect benefit to landless rural people.

The direct beneficiaries of the programme are in the first place those producers that will receive direct training financed and facilitated through this programme. The number of direct benefiting producers is estimated at:

Training effort	Number of direct beneficiaries
FFS participants	80,000
Other farmer training	8,000
Agricultural extension on-demand (district funds)	120,000
Total	208,000

Besides those agricultural producers benefiting directly from training initiated in the context of this programme, many more producers will benefit during and beyond the project lifespan through improved capacity of extension service providers, who are connected to producer organizations, operate as part of private firms, or are independently operating.

These service providers are themselves direct beneficiaries of the programme. Through the programme an estimated 400 first line FFS facilitators will be trained. In addition another 2000, second line FFS facilitators, will be trained (see annex 7.9). Furthermore an estimated 540 extension service providers will benefit form a refresher or special course.

In seed production a total of 90 trainers will be trained, who in their turn will train a total of 240 producer groups or local seed businesses during an entire season on seed

multiplication. For another or the same 240 producer groups or local seed businesses funding is reserved for the training on and implementation of quality control mechanisms for certified seed production and quality declared seed production.

#### 2.6 Intervention Zone

For implementation, the programme will according to the decentralization policy mainly implement through the districts and the zonal offices of the restructured MINAGRI.

The Intervention zone will be country wide for the seed sector component only. This does not mean that the programme will forcibly have to intervene in each sector in each district of the country.

For the Agricultural Advisory Services, the programme will continue to target the 11 districts of the PSNVA project, and extend the activities in a limited number of new districts according to the following criteria, which will be analysed during the base line study.

- The coverage of extension activities by other interventions like the RSSP, PAPSTA and LWH.
- · the district dynamism and absorption capacity
- the district population

Based on an annual internal evaluation and the mid-term review, the Steering Committee will take the decision of the number of districts to be covered by the Belgium supported programme.

### 3 Intervention framework

### 3.1 General objective

As this programme seeks to support the implementation of the Strategic Plan for the Transformation of Agriculture II (SPAT II), the goal of this programme is similar to the goal of the SPAT II:

Agricultural outputs and incomes increased under sustainable production systems and for all groups of farmers, and food security ensured for all the population.

Therefore the programme also takes SPAT II as its guidance for developing the logical framework. The programme seeks to contribute to the achievement of the SPAT II goal through its specific objective that is directly linked to the SPAT II goal.

### 3.2 Specific objective

The specific objective of the programme is:

Improved access to advisory services for crops and livestock and access and use of high quality planting materials of food crops for men and women.

Through the improved access to advisory services that facilitate the farmers' orientation on agricultural output markets, in combination with the use of quality seed, the income from food crops for both men and women farmers can increase. Furthermore as a result of higher yields the programme will contribute to the achievement of the goal of food security in Rwanda.

In the outcome assessment the change in farmer satisfaction with agricultural advisory services, of both men and women, in different wealth classes, will be compared to the starting situation recorded in the baseline study.

The use of high quality seed by agricultural producers will have doubled by the end of the programme compared to the situation at the start of the programme, and the import of high quality seed will have reduced by 50%.

### 3.3 Expected results

The programme expects that the specific objective of the programme can be fulfilled by achieving five results:

#### Result 1:

Seed production chains of specific groups of food crops with a market value are professionalized.

The performance in this result area will be measured through the increase in the production of quality seed in the six seed chains with identified crops (see activity 1.1) of the country

#### Result 2:

Increased private sector involvement in the seed sector.

The achievement of result number 2 will be monitored as a function of the increase in market share that the private sector has for the seed chains identified.

#### Result 3:

Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services.

The achievement of result 3 will be measured through the use of the district agricultural platforms as demand articulation mechanism for agenda setting by the district administration, development projects, zonal MINAGRI/RAB offices and NGOs.

Furthermore the availability of up-to-date needs assessment results, and its use in the allocation of resources for advisory services, is an indication of the functioning of the system.

#### Result 4:

Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations.

The achievement of result number 4 will be measured as a function of the increase in the number of practicing non-public advisory service providers, the number of active groups of farmer field school graduates and the number of farmers trained for each of the prioritized crops in a District.

#### Result 5:

Lessons learned on agricultural advisory services and seed supply services documented and used in policy and decision-making.

The success in relation to result 5 will be assessed on the basis of reference to the documented project lessons in policies, strategies and action plans related to advisory services and seed sector improvement.

#### 3.4 Results and activities

# Result 1: Seed production chains of specific groups of marketable crops are professionalized

The activities proposed to achieve result 1 will lead to a professionalization of the seed production in Rwanda. The cornerstone and important starting point for achieving result 1 is the preparation of tailor made strategies for groups of crops with similar seed system opportunities (activity 1.1). This activity will allow for more detailed planning of the future division of tasks among different actors in the seed sector and will assist the project to plan its seed related activities, and make specific decisions for different crops, at a level of detail that can not be provided during the more generic formulation phase of this project.

Activity 1.2 focuses on improved selection of varieties that are required by the market and producers. This activity will assist RAB in assuring that its variety selection remains participatory and well focused on the needs of the actual end-users of varieties.

Under activity 1.3 the foundation seed production will be professionalized. Based on the tailor made strategies for different crops, decisions will be made on the division of tasks between public and private entities. Most foundation seed production would however remain an important public task. The foundation seed production will under this activity be made more durable and cost efficient, to assure a reliable, auto-financed supply of high quality foundation seed.

For the production of large volumes of quality seed (either certified or quality declared) large numbers of seed producers are required that make a living out of their seed business (activity 1.4). A seed production business could be run by an individual producer or a group of producers. In either case, training in seed production is required. This training will, again, be tailored for specific crops or groups of crops, to fit into the strategy detailed under activity 1.1. The training of seed multipliers will be done through practical on-the-job training, following principles of farmer field schools. As such this activity will be linked closely to activities under result 3 and result 4.

Activity 1.5 focuses on the improvement of quality control in the seed production system. Quality control systems are key to the improvement of the quality of seed produced and marketed in Rwanda. Also effective quality control requires crop-specific intervention. Some crops are suitable for strict regulation of certified seed production, other crops, specifically vegetatively propagated crops require a combined strategy of certified seed production and quality declared seed production. Based on the seed strategies identified under activity 1.1 the existing quality control system will be improved and the recently adopted seed law will be brought into practice and evaluated for its effectiveness in supporting the increased availability to producers of high quality seed.

# Activity 1.1: Prepare tailor made strategies and action plans for groups of crops with similar seed system opportunities

#### Rationale

In agricultural development often the terms 'seed chain' and 'seed sector' are used. In reality however, there is no such thing as a single seed sector or seed chain. Each crop has different characteristics in terms of for example the profitability of seed production, the quality requirements and the technology of multiplication and marketing. This results in crop specific seed chains that are a part of the wider crop production and marketing chain of that crop.

As such no single strategy can be made for the development of the 'seed sector' in Rwanda. In stead various strategies are required, depending on the specific challenges and opportunities of each group of crops.

Six different groups of crops with similar opportunities and challenges are proposed for which specific strategies are needed. In annex 7.8 the first broad lines are presented that can be used as the starting point for the further elaboration of the specific crop group

strategies by the new programme.

The groups of crops described are:

- Indigenous vegetables and forage crops
- Banana, cassava and sweet potato
- Fruit crops
- Cereals and pulses
- Potatoes
- Hybrid maize and exotic vegetables

In each seed strategy it will have to be elaborated:

- How much resources will be invested into the improvement of the seed system of that crop or group of crops under the activities of the larger project. This will be a function of the priority given to the crop by producers, the economic value of the crop or group of crops, and the specific value for poor farmer households and women.
- The balance between public involvement and the private sector. There where seed chain activities can, in a durably profitable manner, be taken up by private entrepreneurs, the public sector needs to withdraw, and allow for and stimulate the development of these private entrepreneurs. Also small-scale seed producers who multiply seed for profit are private entrepreneurs.
- The division of tasks over the different public and private actors needs to be considered for each crop or group of similar crops. This needs to be defined for the seed production chains, starting at the level of conservation and use of plant genetic resources, participatory variety selection and ending with the diffusion or marketing of quality seed.
- How the seed production chains can be diversified and made more professional so that for most of the steps in the multiplication there is a number rather than a single actor sharing responsibilities in a structured manner. This reduces the risk of stagnation as a result of the nonperformance of a single actor, and provides some incentives for the competing actors to improve their services to their clients, and the efficiency of their production.

#### **Activities**

- Studies of the economics of certified and informal seed of different groups of crops
- Stakeholder meetings to elaborate the seed strategy per group of crops, involving experts and practitioners
- Elaborate seed strategies
- Regular seed chain actor meetings to coordinate seed chain improvement

 Implementation of the strategy through the different activities of this project, coordinated by RAB seed chain managers (2 per zone) appointed through the project.

#### **Expected outputs**

- A 5-year strategy for the development of the seed production and marketing chain of the particular group of crops, detailing the responsibilities of public and private actors endorsed by the seed chain actors.
- Reports on the formal and informal seed economics of the most important crops
- A clear division of tasks and responsibilities between seed chain actors
- Improved coordination of tasks between actors in the seed chains of different crops

#### Responsibilities

Actor	Tasks
TA seed business	Advise on studies and private sector involvement
Punctual crop specific technical assistance	Support the elaboration of crop specific seed strategies
Seed chain manager, zonal RAB office	Coordinate studies and stakeholder meetings Compile strategy
Local consultant	If needed hire external local expertise to collaborate with the zonal RAB office in the studies of seed economics
Zonal RAB staff	Conduct studies seed economics
Private certified seed multipliers, and local seed multiplier groups / businesses	Participate in stakeholder meeting and seed chain coordination

For each of the group of crops a seed chain manager is proposed, who will have as the task to lead and facilitate the development of the specific strategy as well as guide professionalization of the chain, and supervise its implementation. An important task in this is to coordinate activities between the different actors in the seed chain.

The seed chain managers would be based at the zonal RAB office where the specific crop or group of crops has its home. In the project funding a reservation is made for 4 seed chain mangers, one for each zone. However, in the long run this task should be taken by MINAGRI staff as part of their portfolio.

#### Resources required:

#### Prepare tailor made strategies and action plans for marketable crops :

Seed chain actor meetings and presentations

Studies seed economics of different groups of crops

Travel budget (car hire, motorbike hire, per diem)

Working budget seed chain managers

Consultancy: technical assistance seed strategy development

# Act 1.2. Participatory variety selection for major food crops with market value

#### Rationale

As shown in the proposed rough strategies in Annex 7.8, specific attention will be given to participatory variety selection, as well as the promotion of newly selected varieties and their dissemination. An important component of a seed system is the steady development of new varieties, increasingly adapted to the environment, and continuously adapting to the trends occurring in the market.

Through putting the emphasis on the field-testing of advanced materials under farmer management, the performance of the formal sector responsible for the identification of new varieties ('plant breeders') can be enhanced. An important advantage of this strategy is that not only early testing results in better adaptation and more likely adoption, it also speeds up the process of dissemination.

The national RAB office will set the priorities for resource allocation for which crops or crop group to target through consultation with the district platforms and processors and traders.

The essence of the funding is to assure the relevance of selected improved varieties for producers, but possibly even more importantly for processors, retailers and consumers. The funds available through this project will allow for participatory testing of candidate varieties with producer groups. It has to be decided how this objective can strategically be combined with the need to execute DUS and VCU trials to assure acceptance of new varieties under the newly adopted Rwanda seed law.

Specifically existing farmer groups, for example graduated farmer field schools, will be instrumental in effective participatory variety selection, promotion of new varieties and subsequently seed multiplication and dissemination. Women will be specifically addressed in order to integrate their knowledge and experiences and to improve the already tested approaches.

#### **Activities**

- Priority setting for the use of programme resources for participatory variety selection and promotion of new varieties
- DUS trials

- Participatory variety trials and VCU tests
- Participatory taste and quality assessments

#### **Expected outputs**

New varieties for priority crops wanted by processors and traders selected, accepted and promoted and available to producers

#### Responsibilities

Actor	Tasks
TA participatory research and extension	Advise in priority setting and design of participatory variety selection activities
National RAB office	Priority setting with stakeholders
Zonal RAB offices	Design and implement participatory variety selection activities  Provide candidate varieties from breeding and selection programs
Farmer groups (for example graduated FFS)	Participate in farmer managed trials
Producers and industry	Participate in taste and quality assessments

#### Resources required:

Participatory variety selection for major marketable crops
Multiplication of material for variety tests
Participatory variety trials (farmer-group run)
Participatory taste and quality assessments
DUS and VCU tests (scientist run)
Travel budget (duty travel car hire, motorbike hire, per diem)
Working budget participatory variety selection

### Act 1.3. Improving efficiency of foundation seed production

#### Rationale

Foundation and breeder seed production, hereafter called 'foundation seed production', is currently exclusively done by ISAR. Although ISAR is performing fairly well in this field, it is felt that further improvement and professionalization of this service is required. This means mainly the development of more autonomous management and operational systems of the production of foundation seed. It should become possible for the units that produce foundation seed under the new RAB, to manage a revolving fund for all the foundation/breeder seed production related tasks. This would allow for better and more efficient financial management and operations, better insight in costs, provide an

incentive for the rationalization of costs, and most specifically improve the timing of availability of required inputs.

Foundation seed production is not a bottleneck of similar magnitude for all crops. The priority given to different crops should be decided on the basis of the economic and food-security impact of improving the foundation seed production. This would justify more emphasis on potato foundation seed production than on for example maize or banana foundation seed production. For banana the amount of foundation seed required is limited, as it is mainly needed for variety exchange and area expansion, while macropropagation of bananas in the field is fairly simple and well developed. For maize the field multiplication rate is such that limited amounts of foundation seed quickly result in the satisfaction of the national demand.

It is essential that the zonal RAB offices that are responsible for the foundation seed production know the costs of their production. They require to strike a balance between state subsidy on foundation seed, and the costs that are passed on to the foundation seed clients. Subsidy on the foundation seed production requires to be well motivated in the business plan, and continuity requires to be assured by the Rwanda government, rather then through project funding. The staff time and use of laboratory equipment, consumables and fields are important parts of the costs and require to be factored in.

State subsidy should be limited to making available human resources and infrastructure for the production of foundation seed. Maintenance of the infrastructure, plus the consumables required for the foundation seed production should be funded through the revolving funds. The revolving funds need to be replenished through the sale of the foundation seed to its users. These users can be research efforts requiring seed for trials, or public, private and semi-private seed multipliers. As such consumables should not be paid directly through the recurring budget of the RAB zonal offices, but through the endusers of the foundation seed. If there is a need to subsidize the production of foundation seed, this must be done through making budget available to the users of the foundation seed, who can buy foundation seed from the RAB foundation seed production, rather than funding the seed production directly.

For vegetatively propagated crops it is proposed to stimulate private entrepreneurs to get into the production of foundation seed or planting material through tissue culture and other rapid multiplication methods, to increase the capacity available in Rwanda, and make the production system less dependent on the production by the current ISAR (see activity 2.3). Although currently the public system, notably ISAR, does deliver the required amounts of foundation seed, this is not done cost effectively, nor in a financially durable manner. It is depending largely on the availability of project funding and the moment project funding is not available the foundation seed production is under threat. Specifically the production of foundation seed of vegetatively propagated crops (potato, banana, sweet potato, cassava) does require substantial resources on reliable and routine basis. Partly sourcing out of this task to private laboratories will make the production more reliable, cost effective and less vulnerable to fluctuations in project funding.

#### **Activities**

- Studies for cost rationalization and business plan development for foundation seed production by the zonal RAB offices
- Initiation of revolving funds for the production of foundation seed by zonal RAB offices
- Fine tuning of the rapid multiplication of potatoes (conventional and aeroponics)
- Experimenting with more cost effective methods of foundation seed production
- Tailor made capacity building of seed chain managers and technicians of RAB
- Procurement and rendering operational of essential missing equipment for effective foundation seed production
- Initiate cold storage for potato mini-tubers in Musanze to optimize use of aeroponics
- Support private sector involvement in foundation seed production of vegetatively propagated crops (see activity 2.3)

### **Expected outputs**

- Business plans for the production of foundation seed by the RAB offices prepared
- Revolving funds set-up by MINAGRI and functioning for the foundation seed production at zonal RAB offices
- Aeroponics and conventional rapid multiplication of potatoes mastered by the zonal RAB office in Musanze
- Improved efficiency of foundation seed production of most important crops.

#### Responsibilities

Actor	Tasks
TA seed business	Advise on business plan development by zonal RAB offices
	Advise and lobby for setting up revolving fund for foundation seed production by zonal RAB offices
Zonal RAB offices	Develop business plans for foundation seed production
	Initiate revolving fund for foundation seed production
Zonal RAB office Musanze	Continue experimentation and adaptation of aeroponics technology for potato mini-tuber production
Punctual technical assistance rapid potato multiplication	Support RAB office in adapting the aeroponics technology and fine-tuning conventional rapid multiplication

Local consultants	If needed external support to zonal RAB offices for business
	plan development

#### Resources required:

#### Improving the efficiency of foundation seed production

Studies cost rationalization and business plan development foundation seed production

Fine tuning rapid multiplication potatoes (conventional and aeroponics): running cost

Cold store mini-tubers (RAB Ruhengeri)

Essential equipment (based on seed strategies)

Capacity building foundation seed multipliers

Experimenting with more cost effective multiplication

Starting capital revolving funds for foundation seed production

Travel budget (car hire, motorbike hire, per diem)

Working budget foundation seed production improvement

Consultancy: Potato aeroponics and conventional rapid multiplication

#### Act. 1.4. Building the capacity of certified and local seed multipliers

#### Rationale

For most of the seed chain development strategies that will be developed under activity 1.1, capacity building of certified and local seed multipliers is required. This will be done according to the needs for the different crops or crop groups, and the details of this activity will have to be elaborated once the programme starts. Priority setting and resource allocation should be decided on by the national and zonal RAB offices based on an assessment of demand and priorities at the level of the districts, using the district agricultural platforms that will be supported under activity 3.1.

For each crop it has to be decided on which type of multiplier the emphasis will be placed. For example for cereals it can be argued that individual private multipliers are best promoted. For potato it can be argued that individual private multipliers need to be assisted in getting into basic seed production and certified seed production, while at the same time more local individual multipliers and multiplier groups can be promoted, who would produce quality declared seed.

A last component that can be considered in parallel to pure training on seed multiplication is to train producers on the better maintenance of the quality of the seed they obtain from their own fields, and which they re-use for the next season. One such technology is positive selection of potatoes, but also maize OPVs. Furthermore ordinary producers can use simple measures to store their self-supply seed better. Through simple measures, the interface between the formal and informal seed system can be enhanced which should result in a better performance of the overall seed system, meaning quality seed of appropriate varieties available and accessible to farmers.

In addition to providing support to seed multipliers in the form of capacity building, the programme will support those farmer groups and individuals that show good progress in the development of their seed business in investing in proper seed storage facilities. Especially for the storage of potato seed this is essential as it provides opportunities for warrantage, credit to finance the new season, while seed from the last season are in storage. To a lesser extend also for storage of cereal seed some minimum infrastructure is needed. Seed storage has the potential to make seed production more profitable, by storing until demands rise in local markets. The programme will support the construction of simple, robust and adapted local stores. Another reservation has been made to support individual commercial seed multipliers in making other investment sin simple infrastructure or equipment, essential for improving the quality of their production. All these subsidies will only be made available to seed producers provided they show proof of development of their seed business. Furthermore the subsidy will only cover part pf the costs and the seed entrepreneur, be it an individual or cooperative, will have to raise a substantial part of the costs of the investment himself.

#### **Activities**

- Priority setting for capacity building of certified and local seed multipliers with a focus on increasing the potential for certification for women's groups
- Develop curricula for training of seed multipliers of specific prioritized crops
- Training of trainers on seed multiplication
- Training of local seed potato multipliers
- · Training of seed garden managers
- Training of certified cereal and pulse seed producers
- Construction of seed stores with promising seed businesses
- Subsidize equipment / infrastructure of private certified seed producers

#### **Expected outputs**

- Minimal 3 training curricula on seed multiplication developed
- 90 trainers on seed multiplication trained (% women to be decided)
- 240 groups of producers trained on local seed potato multiplication (% of women's groups to be decided)
- 180 groups trained on seed garden management
- 80 individual seed producers trained and supported on-the-job in certified production of cereal and pulses seeds
- 200 local seed stores constructed

### Responsibilities

Actor	Tasks
TA seed business	Provide input into training curricula
TA training and communication	Provide input into training methodology, materials and curricula
TA participatory research and extension	Provide input into training methodology, materials and curricula
National and zonal RAB offices	Develop training methodology, materials and curricula Assist in selecting scouting for motivated and talented trainers Training of trainers Pilot with seed producers robust and locally adapted seed stores
District agricultural staff	Assist in selecting scouting for motivated and talented trainers Assist in selecting motivated potential seed entrepreneurs (graduated FFS, individuals, farmer coops)

### Resources required:

Building the capacity of certified and local seed multipliers
Curriculum development seed potato production and business
Curriculum development local seed gardens
Curriculum development training and on-the-job support certified cereal and pulse seed multipliers
Training of trainers local seed potato production and business
Training of trainers seed garden managers (other crops than potato and cereals)
Season long field training local seed potato multipliers (coops, individuals, FFS groups)
Season long training of seed garden managers (coops, individuals, FFS groups)
Training and on-the-job support to certified cereal and pulse seed producers
Partial subsidy of equipment / infrastructure private certified seed multipliers
Basic seed for starting seed multipliers
Partial subsidy decentralized seed potato stores
Installation of seed gardens (other than potato and cereals)
Travel budget (car hire, motorbike hire, per diem)
Working budget capacity building seed multipliers

# Act. 1.5. Development and adaptation of quality control systems appropriate for the different groups of crops

#### Rationale

The quality control in the seed system is currently entirely handled by the RADA seed unit. The unit is understaffed to take on this task and therefore is not able to provide the required services in an effective and efficient manner. Furthermore crops or crop groups have specific needs in terms of quality control. As for many other services in the seed system, it is important to realize that certification is a service that only makes sense when there is a demand for its product by end-users. This depends largely on the crop.

For the cereals there is already a fairly well developed system of seed certification. A certification system also functions for seed potato. The programme aims to enhance the capacity of the system, especially in terms of timely inspection and the accuracy of inspection. To do this training will be provided to certified seed multipliers to improve compliance with seed quality standards. Furthermore a decision has to be made regarding the status of the seed certification services and its level of independence from RADA. Currently the seed certification is run by RADA, which is not a desired state of affairs as RADA is at the same time a seed producer and distributor in its own right. The seed certification will have to become more independent from the seed production unit of RADA. Furthermore it has to assure mechanisms of cost recovery for the services it provides. The new Rwanda seed law specifies that seed certification services will be charged at token prices. This means that the government of Rwanda will have to invest in the staff required to provide effective certification and quality control services. The programme will assist MINAGRI in the development of a plan for future management of these certification services. For the duration of the project a seed quality control officer is foreseen in each zone, to be recruited through MINAGRI. These seed quality control officer will be housed at the RAB zonal offices. Besides assuring quality control service delivery to certified seed growers, they will also have to contribute to the development of a permanent and financially sustainable seed quality control service, with appropriate independence from all seed producing parties.

A seed quality laboratory has been constructed under the AFSR project. A reservation has been made in the project for equipment to render this laboratory operational as part of the improvement of the seed quality control system. The funds for consumables to render the laboratory operational should be made covered through the charges for certification services to assure these services can be continued post-project.

Parallel Quality Declared Systems for local seed businesses, in which the quality control is handled by producer organizations, will form an important additional approach for improving availability of quality seed, specifically for vegetatively propagated crops.

The activities proposed under this programme will have to be coordinated closely with the seed quality control project that FAO is envisaging to implement for a period of 15-18 months, starting roughly at the same time as this programme. It is essential that this program and the quality control system proposed by the FAO collaborative project follow the same strategy. The FAO programme plans to focus on bringing into action the seed law, transforming the inspection service currently under RADA into an independent seed

certification service, and improving the capacity of seed quality inspectors.

#### **Activities**

- Training seed multipliers on requirements for certified production
- Setting up quality control systems for Quality Declared Seed (QDS) with local seed businesses and producer organizations for prioritized crops
- Assisting in making the certification system more independent of RAB, and the development of a future strategy for these services
- Start service delivery by the seed quality laboratory

#### **Expected outputs**

- A 50% increase in private certified seed production
- A minimum of 5 QDS systems set-up and running
- At least tripling the amount of quality seed available for the selected priority crops
- · Improved punctuality of quality control services
- Functioning seed quality laboratory
- A strategy for future independent seed quality control service delivery

#### Responsibilities

Actor	Tasks
RAB national and zonal	Facilitate priority setting for seed quality system improvement Support changing the status of the seed quality control unit
TA seed business	Advise on the set-up of the seed certification body
TA training and communication	Advise on the content of the training for certified seed producers  Advise on the content of the training for Quality Declared Seed system development
Punctual technical assistance on quality declared seed system set-up	Design and assist in implementation of quality declared seed systems for priority crops
Seed chain coordinators	Coordinate training of local seed businesses
Seed quality inspectors	Participate in training development, priority setting and changing the status of the certification unit.

#### Resources required

# Development and adaptation of quality control systems appropriate for different crops

Quality control system set-up (quality declared seed) with local seed businesses

Consumables seed laboratory

Essential equipment seed quality laboratory

Consultation: decentralized certified and Quality Declared seed production

Travel budget (car hire, motorbike hire, per diem)

Working budget seed quality control agents

Working budget quality declared seed development

# Result 2: Increased private sector involvement in the seed sector

One of the important principles for the strategy to promote professionalization in the seed sector is to find a better balance between private and public sector interventions. In Figure 1 the current and the desired (proposed) state of the seed chains. In the current situation private sector involvement in the seed chains is very limited. ISAR produces the foundation seed, which it provides to RADA. RADA seed unit produces basic seed, provides it to private multipliers, does the quality inspection, buys back most of the seed from the producer, to be sold to the Crop Intensification Programme, which takes care of the distribution. This system has a very limited role for private entrepreneurship.

In the current system there is a sufficient production of foundation seed by ISAR, but as stated under activity 1.3, the efficiency of this production is not optimal, and it relies to a large extend on project funding, which makes it vulnerable and a disruption in foundation seed production has been experienced in the past when project funding terminates. Parallel foundation seed production capacity in the private sector is desirable, especially for vegetatively propagated crops that are harder and more resource intensive to reproduce. This will make the seed system stronger and less vulnerable to shocks in resource availability in the public system. This program will facilitate the start-up of a private tissue culture laboratory with the capacity to produce foundation and basic seed of vegetatively propagated crops (activity 2.3).

Basic seed production, again especially of vegetatively propagated crops, is currently not optimal. The RADA seed unit is performing very well when compared to the research organizations in neighbouring countries in neighbouring countries with the mandate for basic seed production. However, more efficient and client oriented basic seed production is possible. Efficiency and client orientation do however only develop if the right incentives for this are in place. Ultimately the right incentives for efficient production are provided through full budget responsibility and a for-profit or at least a full cost recovery requirement of the organization producing the basic seed. Currently the RADA seed unit runs on public funds combined with project funds, which in essence provides no incentive

for client orientation and efficiency. This programme will assist MINAGRI and RADA in the transformation of its seed production activities into an independent seed production enterprise (activity 2.1).

Private certified seed production has developed thanks to the AFSR project. Especially for cereals, and to a lesser extend for potatoes private multipliers exist. This programme will seek to build in this achievement and work towards a strong and self-reliant network of private certified seed multipliers. A larger number of private and local groups of seed multipliers will be trained and supported. Among these there will be producers who target certified seed production for mainly national level marketing while others can opt for multiplying under a quality declared seed system for more local marketing. Currently the seed multipliers depend largely on RADA for the marketing of their seeds through the Crop Intensification Programme. No other distribution network of seeds exists. This programme will assist the producers of seeds in organizing themselves into seed associations, building on the CC-AFSR that has been developed under the AFSR project. Furthermore the programme will support the development of private seed handling, packaging and marketing capacity (activity 2.2).

An important principle for all the activities that aim to facilitate the development of a stronger private sector involvement in the different seed chains is that the programme will not subsidize running costs of production, nor will the programme invest in heavy infrastructure for the private sector. Investments in infrastructure will first and foremost have to be financed through entrepreneurs themselves, directly form their own resources, or through credit obtained by the entrepreneurs. Limited and partial co-investment by the programme will be considered only in those cases where commercial credit is clearly refused, the risk for the entrepreneur is prohibitive, and the investment is of a value that goes beyond the immediate interest of the private entrepreneur.

Access to credit for seed producers is currently however limited. The limited access to credit does hamper the growth of private seed multiplication in different manners. For example the current private seed businesses that produce certified seed are having difficulties growing in spite of their ambition to do so and the profitability of their business. Especially the acquisition of additional land which is required to increase their individual production capacity is a major constraint. Another example is that small seed potato producers are under pressure to sell seed on the ware potato market as there is demand at harvest and they are in need of cash. It could be sold as quality seed 2 months later at planting time for a much higher profit, but this would require credit for the farmer to bridge this period. Similarly there are needs for credit for the production campaign to buy basic seed and the recommended inputs as well as labour for optimal seed production. The programme will support private sector development in the seed sector through matchmaking efforts between the needs of the private multipliers and the credit opportunities offered in the Rwandan financial market (activity 2.4).

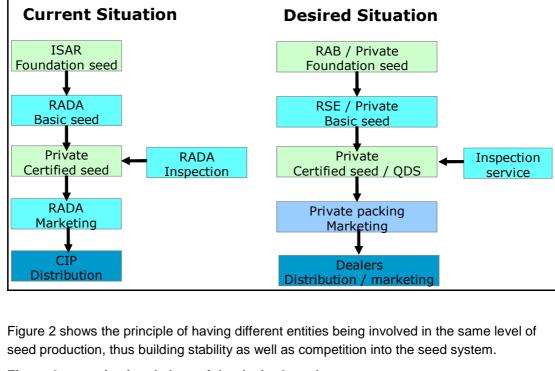


Figure 1: Sketch of the current and desired division of tasks in the seed system

**Organizational Chart Seed System SWAP Program 1** TA seed business **Foundation Seed Zonal RAB offices** Seed chain managers Private tissue culture **Basic seed Rwanda Seed Enterprise Private Certified Seed Growers Certified seed Private Local Seed** Agro-dealer packaging **Businesses** networks **Quality declared seed** Informal seed exchange

Figure 2: organizational chart of the desired seed system

# Activity 2.1: Transform the basic seed production of RADA seed unit into a Rwanda Seed Enterprise

#### Rationale

Currently basic seed production is done by RADA. The RADA seed unit is making an essential contribution to the Rwanda seed system through this, and is, compared to similar public bodies in the region, fairly efficient. To make it even more efficient and better responding to the demands of clients, it will however have to be subjected to more market incentives. It is proposed to turn the production of basic seed into a more efficient enterprise that delivers better and more efficient seed production services. To do this it is proposed to make the basic seed production a separate entity, here named **Rwanda Seed Enterprise** (**RSE**).

The RSE will build upon the technical capacity in the production of basic seed for several crops available in RADA. The legal status of the Rwanda seed Enterprise will have to be decided on during the first phase of the project implementation. It could be either a public enterprise or a joint venture between public and private parties, with or without seed producers as shareholders. Of key importance is that as a result of its legal status the capacity of the Rwanda Seed enterprise in financial and marketing management, which are key to any seed business, will be re-enforced.

This Rwanda Seed Enterprise would be an independent, state owned or joint venture, enterprise that would work as a for-profit organization. If this is legally complicated to achieve, it will at least have to function as a unit that has to recover its costs, including costs for staff. It could be structured as a public enterprise embedded within MINAGRI under the direct responsibility of the Minister and governed by a Board of Directors including representatives of the government of Rwanda, private seed producer representatives (organized in the Rwanda Seed Growers Association, see activity 2.2) and representatives of farmers' organizations. By its entirely or partly public nature it will focus on major food crops (cereals, pulses and potatoes).

The main mandate of the Rwanda seed enterprise would be the production of basic seed. Possibly in the longer run also foundation seed could be produced by the Rwanda Seed Enterprise, as it was recommended in the final evaluation of the AFSR project. However, for the duration of this project it is considered only feasible to initiative a Rwanda Seed Enterprise focusing on basic seed production. Foundation seed production is very much connected to the research stations and expertise. The best chance to professionalize foundation seed production and steer towards auto-financing in the next years is through the setting-up managed by the RAB zonal offices that already dispose of the necessary infrastructure and the technical expertise. What may be lacking is the management expertise to run the foundation seed production effectively, which can be hired through this project (see activity 1.1 and 1.3)

Currently under the AFSR project the RADA seed unit is buying back seed from seed multipliers to provide to the Crop Intensification Programme. It may be required for either the Rwanda Seed Enterprise to continue this role for the sake of connecting the individual seed multipliers to the large institutional client, the CIP. This would help secure a market for the emerging professional seed multipliers and serve the CIP in sourcing seed locally.

It is of utmost importance however that the Rwanda Seed Enterprise does not engage in producing certified seed itself, but relies on contract growers who have the long-term ambition to become professional seed multipliers, even if the market conditions change.

In the longer run it is preferable to have an independent fully commercial company that makes a business out of contracting seed growers, and handling, packaging and marketing seeds. Stimulating the emergence of such an enterprise or enterprises will be the objective of activity 2.2.

It is important that the Rwanda Seed Enterprise will operate at a profit oriented, or at least at cost recovery basis, as otherwise no private sector actors get a fair chance to come into the market. Clients would be originating from both the private sector (seed multipliers buying basic seed) as well as from institutions wanting to buy basic seed for development projects.

The actual transition process of the production by RADA to a separate seed enterprise will be supported by the programme. It is not so much infrastructure that has to be adapted. If the Rwanda Seed Enterprise has the support of the government as a separate entity, it would have to take over the responsibility for the land and facilities that currently RADA uses for its production tasks. Furthermore the current expertise available within RADA regarding the production of basic seed would have to be used in the new enterprise. The shift of staff from RADA to the new entity will also take time and effort.

Ultimately it requires specific expertise to run a seed business (with a business plan as its guide), and currently this expertise is not available within RADA. Therefore the programme would support the process with a technical assistant in the field of seed business, to, amongst other tasks, advice on the running of a seed business. At the same time the Seed Enterprise would require a change manager who is able to take the basic seed production unit through the process of becoming an enterprise. As the separate seed production entity would still be owned by the Rwandan government, it should employ the manager. For this funds are reserved under this programme.

#### **Activities**

- Decide on the mandate of the Rwanda Seed Enterprise
- Prepare a business plan for the Rwanda Seed Enterprise
- Study and adapt the legal framework for the Rwanda Seed Enterprise
- Present the business plan for the Rwanda Seed Enterprise to the relevant decision makers
- Support the transition process from RADA seed unit to Rwanda Seed Enterprise
- Train RSE staff in seed business management
- Initiate contractual linkages between Rwanda Seed Enterprise and RAB foundation seed production
- Initiate contractual linkages between RSE and long term projects sourcing seeds

Initiate where necessary contract farming arrangements with seed multipliers

#### **Expected outputs**

- An independently run state owned seed enterprise running at cost recovery or modest profit
- RSE governed by a board of directors representing the interests of different stakeholders in seed with a gender balance in the board of directors
- RSE delivering 50% more basic seed than RADA seed unit at a higher satisfaction by clients
- RSE sourcing foundation seed from RAB at cost recovery or slightly subsidized price, according to the ambitions set in activity 1.3 by RAB.

### Responsibilities

Actor	Tasks
TA seed business	Support business plan development
	Involve main stakeholders in RADA in the process
	Coordinate the transition process
	Inform decision makers of progress and required action
	Coach RSE staff in seed business management
MINAGRI / Ex-RADA /	Support the transition process
RAB	Provide the technical expertise for seed multiplication
	Assure access by the RSE to land and infrastructure for seed production under favourable conditions
RAB zonal offices	Assure the timely availability of foundation seed required for the RSE

#### Resources required

Transform basic seed production RADA seed unit into a Rwanda Seed Enterprise
General manager Rwanda seed enterprise
Investment car
Consultancies (studies)
Legal advise
Material costs (consumables)
Training RSE staff (in-country, on-the-job)
Establishment of farmer based seed multiplication schemes
Essential equipment
Travel budget (car hire, motorbike hire, per diem)
Working budget transformation basic seed production

# Activity 2.2: Support the professionalization of private multipliers and the development of a seed handling, packaging and marketing enterprise

#### Rationale

There is a class of emerging larger seed multipliers who have been increasing their production with the support of the AFSR project, and who have benefited from the increasing demand for quality seed as a result of the Crop Intensification Programme. These producers are united in the "cadre de concertation" (CC-AFSR). The CC-AFSR has received support from the AFSR project to represent the interests of the actors in the seed sector. Under the new program the CC-AFSR should become more independent and become a true member organization. This organization is here called the Rwanda Seed Growers Association (RSGA).

Currently there are ideas within the CC-AFSR to initiate a specific enterprise on the treatment, packaging and marketing of certified seeds produced in Rwanda. Such a company would be an asset for the Rwanda seed sector. The lack of such an enterprise is the reason that currently RADA is playing an important role in the marketing of seeds. This is a role however that is believed to be better played by the private sector, as in the setting of an enterprise there are better incentives for delivering a service that actually answers the need of the clients of seeds.

At the same time there is a development in which the Rwanda government is involved in the set-up of a public-private partnership for the processing and packaging of certified seed to tackle the problem of a lack of professional seed handling, packaging and marketing. For this initiative a memorandum has been signed with the company CIMBRIA.

Under this activity the new programme will support the development of private seed treatment, packaging and marketing capacity. The form and shape that such an enterprise or even multiple enterprises would take can at this stage not be predicted. The initiative however of a number of larger seed growers to initiate their own seed packaging and distribution enterprise is a good starting point for assessing the opportunities and defining the role the programme can play in the facilitation of the development of a professional seed treatment and marketing industry.

#### **Activities**

- Support the transition of the CC-AFSR into a Seed Growers Association
- Feasibility studies, business plan development and legal advise for initiation of seed handling, packaging and marketing enterprises
- Technical support in the field seed handling, treatment, packaging and marketing
- Support the linking of emerging seed handling, packaging and distribution enterprises to seed distribution projects such as the Crop Intensification Project and IFDC-CATALIST programme.

- Assist the emerging enterprises through match making with financial institutes, based on the developed business plans (see activity 2.3)
- If required, limited co-investment in equipment needed for emerging enterprises

### **Expected outputs**

- An independently running Seed Growers Association, defending the interest of seed multipliers in Rwanda
- One or more enterprises with as core business seed handling, packaging and distribution running profitably by the end of the project.

### Responsibilities

Actor	Tasks
TA seed business	Support business plan development  Coach emerging enterprises in seed technology and business development  Match making between enterprises and credit providers
Seed chain managers	Scout for entrepreneurs interested and talented to engage in seed handling, packaging and distribution
Crop Intensification Program	Source seeds from newly emerging enterprises
RAB	Support emerging enterprise with seed technology know-how
CC-AFSR	Work on a membership base and self-sufficiency from member fees

### Resources required

Support the professionalisation of private multipliers and the development of a seed handling, packaging and marketing enterprise:
Consultancies (studies)
Management training
Miscellaneous training
Legal advise
Equipment / materials
Travel budget (car hire, motorbike hire, per diem)
Working budget professionalisation of private multipliers

# Activity 2.3: Match making between private seed producers and entrepreneurs and credit providers

#### Rationale

In connection to the capacity building also match making is proposed between credit suppliers, seed producers and other actors in the seed chain. It is clear that tailored credit facilities for seed production do currently not exist, and access to credit for seed multipliers is limited, in spite of the profitability of the enterprise according to the multipliers. The programme can assist through documenting the profitability, assuring technical advice to producers to limit risks of crop failure, and brokering between credit providers and producers.

The match making between individual seed producers and credit providers is an intensive exercise. As such it will have to be investigated with credit providers whether specific financial products can be developed for those activities that require credit routinely, such a seed storage, seasonal production credit or credit for seed distributors.

The match making is intensive work and seemingly only benefits a very limited number of people directly. Although it is true that the individual seed growers are the direct and major beneficiaries, the poverty impact should not be expected at the level of the seed multiplier. A seed multiplier requires substantial land, and is thus per definition not among the poorest and smallest landholders. The poverty impact has to come from an increased availability of affordable quality seed that is wanted by smallholder producers. The best manner to achieve this is to stimulate the emergence of a class of effective seed multipliers who are able to make a good living out of seed production.

#### **Activities**

- Support seed businesses in elaboration and defense of credit proposals
- Lobby with financial institutions for the consideration of credit proposals
- Collaborate with credit providers in the development of tailored financial products for seed multiplication activities.
- Support credit providers with data collection and relevant information required to assess the bank ability of credit proposals.

#### **Expected outputs**

- Improved access to credit for seed businesses with a specific attention for women
- Tailored standard products for common credit needs of seed businesses

#### Responsibilities

Actor	Tasks
TA seed business	Lobby with financial institutions for development of tailored products
Seed chain managers	Support the individual entrepreneurs in their credit proposals
RAB zonal offices	Collect and make available data required by credit providers Support the individual entrepreneurs with their credit proposals
Local consultancy	Assist where needed the zonal RAB offices with data collection and credit proposal improvement

#### Resources required

Match making seed producers and entrepreneurs and credit suppliers:
Consultancies (studies)
National stakeholder meetings
Travel budget (car hire, motorbike hire, per diem)
Working budget for match making

# Activity 2.4: Support the establishment of a private tissue culture laboratory

#### Rationale

Currently there are only publicly run tissue culture facilities available in Rwanda. In the light of the diversification of service providers in the seed sector, it would be desirable to also have privately run tissue culture facilities. In Kenya, Uganda and Burundi private tissue culture laboratories exist. Furthermore a recent feasibility study, executed in the context of the Belgium-Rwanda horticulture sector support project, has shown that a modest private tissue laboratory could be started up at a cost of 30,000 Euro. The main risk which could prevent investors from engaging in such an enterprise is the possible competition by the public laboratories, which are, to the credit of ISAR that is running most of them, quite efficient.

Especially for the rapid multiplication of vegetatively multiplied crops such as potato, banana, sweet potato, cassava and pineapple tissue culture capacity is needed. Currently the system is dependent entirely on the public infrastructure. Although this public infrastructure is producing foundation seed with commendable efficiency, it is prone to the typical constraints of public systems as it lacks incentives for cost efficiency and client orientation. A private capacity in rapid multiplication would make the system more robust and less vulnerable to ruptures in funding and cash flow that are not uncommon in the public system.

The programme could facilitate the emergence of a private tissue culture laboratory

through a sourcing contract for the duration of the programme. The project requires seeds of vegetatively multiplied crops for the training of new seed multipliers. It can source these materials from the private tissue lab on a long-term contract basis, so that it will have a secured market for the first years of its existence.

#### **Activities**

- Support business plan development for private tissue culture facilities
- Guarantee a long term contract for tissue culture materials, thus assuring a market for the start-up enterprise
- Assure professional and cost effective inspection services of materials under multiplication
- · Provide technical support and training for the tissue culture laboratory staff
- Support exchange visits to other private tissue culture laboratories in the region
- Assure that publicly run tissue culture laboratories produce materials at a cost-recovery basis, including costs of staff, rather than in a subsidized manner.
- Provide a tax-holiday for profits from the tissue culture enterprise

#### **Expected outputs**

A private tissue culture laboratory established in Rwanda routinely producing planting of vegetatively propagated crops

#### Responsibilities

Actor	Tasks
AT seed business	Advise on the business plan development for private tissue culture laboratory
	Refer potential clients to the private facility
Seed inspection services	Provide timely and accurate quality control services
ISAR	Share know-how and pre-basic seed for starting up
	Train staff tissue culture laboratory
	Refer potential clients to the private facility
	Facilitate exchange visits with other private laboratories
MINAGRI	Provide favourable feed-back and lobby for a tax holiday for the enterprise
	Restrain from competition through subsidized production of planting material
	Refer potential clients to the private facility

#### Resources required

Support the establishment of a private tissue culture laboratory
Consultancies (studies)
Training tissue laboratory staff
Working visit private labs neighbouring countries
Travel budget (car hire, motorbike hire, per diem)
Working budget support private tissue culture laboratory

# Activity 2.5: Support the start-up of the Rwanda Agro-Biodiversity Center

#### **Rationale**

The building of a gene bank was a component of the AFSR project, which is currently running under a no-cost extension. The building has been finalized, and basic equipment is in place. What is now required is to make the genebank operational as the Rwanda Agrobiodiversity Center (R-ABC). To support the process of putting the R-ABC in operation, the programme will support:

The building up of first collection, in order of importance, of

- Beans
- Indigenous vegetables
- Maize (Open Pollinated Varieties)

This will provide the new institution a basis for developing mechanisms dealing with seed crops with dissimilar reproduction systems and for which unique diversity is encountered in Rwanda.

Furthermore these crops are strategically chosen to ensure embedding of R-ABC within the total seed chain, including (re-)introduction of local materials to farmers.

During the AFSR conclusion, until the start of the new program, the R-ABC is proposed to develop an action plan to initiate collection, characterization and documentation activities the moment the new program is launched.

Once in its initial operation, the R-ABC will be in the position to secure contribution by the GoR and be eligible for accessing resources of the Global Diversity Trust. The Global Diversity Trust, in combination with the GoR, is more suitable to provide the R-ABC with a durable source of funding for routine genebank operations than a program such as the BTC-MINAGRI program on seeds.

#### **Activities**

 Initiating collection, characterization, documentation and storage of plant genetic resources of maize, beans and indigenous vegetables, and taking an active role in promoting the use of these genetic resources in participatory varietal selection and dissemination

- Promote the active use of plant genetic resources through (re-)introduction
- Provide technical advice, to coach the inexperienced R-ABC staff in their first experiences in collection and operating the gene-bank
- Support the elaboration of an agrobiodiversity programme in the form of a multi-year operational plan
- Build connections with other genetic resource conservation units in the region
- Support the access of resources through the Diversity Trust and other funding mechanisms adapted to biodiversity conservation on the basis of the operational plan

#### **Expected outputs**

- A long term operational plan elaborated and funded through appropriate funding mechanisms
- The R-ABC established as an internationally acknowledged biodiversity conservation partner
- The Rwandan agro-biodiversity in beans, indigenous vegetables and maize collected and stored
- The R-ABC staff able to run the R-ABC without external technical assistance

#### Responsibilities

Actor	Tasks
RAB / ex-ISAR	Provide manpower for the R-ABC operations
RAB zonal offices	Support the collection of germplasm from the field
R-ABC staff	Collect and store germplasm
Punctual technical assistance	Provide coaching and on-the-job support for the inexperienced R-ABC staff  Take the lead in elaboration of the operational plan and grant proposal writing

#### Resources required

Support the start-up of the Rwanda Agro-Biodiversity Center:
Consumables
Equipment/materials
Training Rwanda ABC staff (in-country, on-the-job)
Regional networking
Travel budget (car hire, motorbike hire, per diem)

Coaching Rwanda Agro-Biodiversity Center

# Result 3: Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services

Result 3 concerns the governance, management and handling of demands for marketoriented agricultural advisory services. To achieve this result the programme will build the basic system for enhanced demand articulation and analysis, which is fully integrated into the decentralized governance system and the restructured MINAGRI. Through an improved articulation and analysis of the demand, combined with improved capacity and mechanisms to effectively respond to this demand, the quality of the advisory services delivered will improve.

The different public structures involved will have distinct functions based on the principle of subsidiarity. At national level national policies and strategies for research and extension are defined and adapted. This is done within SWAP Programme 2, and in the national level RAB. The zonal RAB offices establish and monitor plans for the Zone and its Districts. The zonal RAB offices will depend in on the District level administration for ontime provision of data and information, including service demands.

Demands for agricultural advisory service provision are assessed at the level of the districts. For this demand assessment District Agricultural Platforms will be formed in each district. These platforms will be sub-committees of the Joint Action Development Forums (JADF) that have been created in each district to coordinate development interventions. District Agricultural Platforms' have already been established in 11 out of the 30 Rwandan districts under the PASNVA project, and will be established country-wide under activity 3.1.

The District Agricultural Platforms will have as main functions the articulation of demand for advisory services in the district, the coordination of the response to these demands and the links and coordination with other support services such as agricultural inputs and credit. The composition of the district agricultural platforms will have to mirror as much as possible the clients for agricultural services. As such the members of the platforms will be pre-dominantly representatives of producer organizations, representing the interest of their direct members and non-member farmers who have similar demands for agricultural services.

The zonal RAB offices will assist the district agricultural platforms in the appropriate analysis of the demand for advisory services. The zonal RAB offices will provide the tools and methods the district platforms can use to assess the needs of the targeted farmers in the district. Needs assessment is done from a commodity sub-sector perspective. It will be determined which are the priority crops for income generation by the targeted farmers. Within the supply chain of these crops it will be identified what are the main constraints and opportunities for improved value addition as a result of provision of effective advisory services. A good articulation of demands will result in effective, up-to-date and differentiated service provision to targeted groups will take place. District authorities

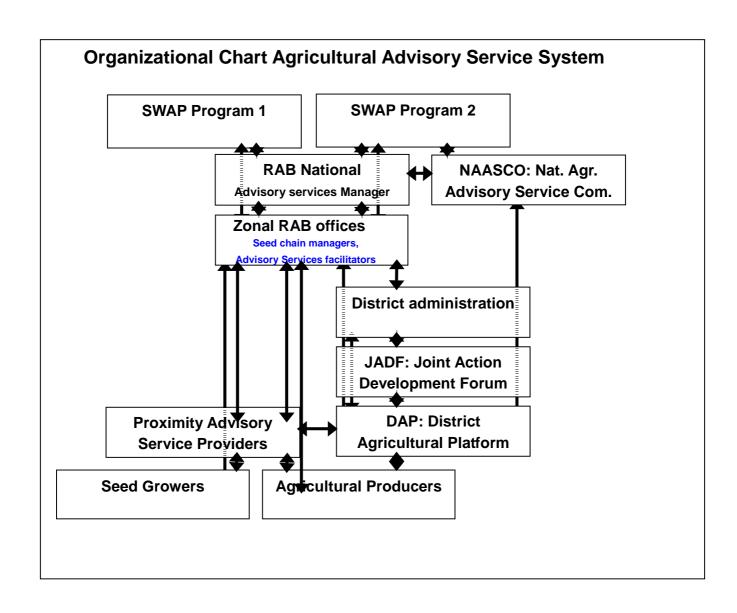
and/or RAB can either fund and contract local advisory service providers through a District fund or use a voucher system to enhance service provision through the existing systems established by producer organizations. If locally no capacity exists to respond to the identified needs the zonal and national RAB offices will respond by building this local capacity.

To assure an effective response at the level of the zonal RAB offices agricultural advisory service teams (AAS teams) will be created that have the mandate to coordinate and implement the response to the needs arising form the districts.

Finally also a National Agricultural Advisory Service Committee (NAASCO) will be created, as also foreseen in the NAES. This national committee will, just as the district platforms, represent the clients of agricultural advisory services, which includes both farmers as well as advisory service providers. The main role of the national platform is to articulate needs for policy adjustment and highlight issues, critically assess and evaluate the performance of the national system of agricultural advisory services from the point of view of the ultimate beneficiaries.

Through the creation of these structures at district, zonal and national level, and formalizing the effective linkages between these different structures the communication within the national system of agricultural advisory services will greatly improve (see figure 3). Simultaneous investment in improving the quality and accuracy of the demand by producers for services, as well as the capacity of service providers to supply a quality response to these demands will have a major impact on the functioning of the whole advisory service system. The setting up of the different institutions is another step in implementing and scaling up of the NAES. Based on the existing experiences through the PASNVA project, combined with insights emerging during the country-wide roll-out of the NAES a review and subsequent adaptation of the strategy will be required and is made part of the new programme.

Figure 3: Communication and interaction between the different actors in the agricultural advisory service system



## Activity 3.1: Set up District Agricultural Platforms, Zonal Agricultural Advisory Service Teams and a National Agricultural Advisory Service Committee

#### Rationale

The programme will contribute to the building of a basic system for enhanced demand articulation and analysis, which is fully integrated into the decentralized governance system and the restructured MINAGRI. The different public structures involved will have distinct functions based on the principle of subsidiarity: (i) District Agricultural Platforms under the JADF will assess demands and coordinate agricultural advisory service delivery; (ii) Zonal RAB offices establish monitoring plans and provide support to Districts when needed; and (iii) MINAGRI and RAB at central level define and adapt research and extension policies based, among others, on information provided by the Zones and Districts; and (iv) the NAASCO will represent the interests of agricultural advisory service system clients at national level.

#### District agricultural platforms under the JADF

The centrepiece for improved demand articulation, analysis and responsiveness will be the District Agricultural Platforms, which have been piloted under the PASNVA project in 11 districts. Demands for services come through different channels to the District Agricultural Platform. The platform, with support by the zonal RAB offices, will analyze the needs, while taking in account the District Development Plans and national policy orientations, and orient the types of services needed.

Information channels for demand articulation will be diverse and relying on existing farmer-led institutions such as networks of graduated FFS, producer organizations, cooperatives and specialized service providers, who will be represented in the platforms. In those areas where there are no strong farmer organizations, agricultural committees can be organized at Sector level (as foreseen in the NAES document), with the sector agronomist as conveners, to voice the needs of a specific sector. Care will be taken however to only initiate a sector agricultural committee if there are no other existing structures that represent the voice of the target farmer population.

As for the District Agricultural Platforms, it is essential to think through the representation and mandate of these committees. Deciding on the membership of the platforms will be a delicate matter. Clear criteria for membership of the platform will have to be developed by the programme in its early stage, by RAB at national level. It is proposed that the zonal AAS teams together with the district administration and established producer organizations nominate members of the district agricultural platforms, following the criteria. The JADF will have to endorse the proposed membership.

The District Agricultural Platforms will get a good understanding of the demand for advisory services through the needs assessments they will implement with the assistance of the zonal RAB office. Based on this understanding the platforms have the opportunity to improve the response by the agricultural advisory system by using two complementary instruments.

In the first place the District Agricultural Platforms will have the mandate, through the JADF, to *coordinate* the service delivery by public, non-governmental and producer organizations in relation agricultural advisory services. The platforms will *advise* the district administration and non-public interveners in the agricultural system with regard to the best response to the advisory service needs of producers. They will do this with the support of the zonal RAB offices that have a better oversight and in-depth technical and socio-economic knowledge relevant for decision making.

The second instrument at the disposal of the District Agricultural Platforms will be a *fund* for *contracting* local service providers. The platform will be responsible for the selection procedure of service providers, while it will be the district administration that safeguards the consistency with the district priorities and is responsible for the actual contracting of service providers as well as the control of the quality implementation. Different options for contracting services, either directly or through voucher systems will be piloted (see activity 3.4).

The pilot experience of the PASNVA project has provided valuable lessons on the functioning of the district agricultural platforms. Based on these insights some notable changes will be effected compared to the system that has been piloted under PASNVA:

- 1. The district platforms will have no implementation tasks.
- The representation in the district platforms will be focused on the assessment and articulation of the demand of agricultural producers. Memberships will be restricted to direct representatives of farmers.
- 3. Development project representatives will no longer be members of the platform.
- 4. Representation of women and economically underprivileged groups deserves specific attention in the composition of the platforms as well as in the communication structures with the grassroots level.
- 5. The district agronomists will be observing, non-voting members and facilitators of the platforms.
- 6. No specific communication structure up to grassroots (*Umudugudu*) level will be build, as demand articulation does not require such a complete communication pyramid. At grassroots level farmer cooperatives, producer organizations and FFS groups can function as the structures for demand articulation. Only in those cases where a clear lack of effective farmer representation is identified, sector level agricultural committees will be initiated to assure grassroots opinions are captured well.

The District Agricultural Platforms will be initiated as sub-committees of the Joint Action Development Forums (JADF) that are being set-up in each District to coordinate development initiatives and advise the District administration on the implementation of development initiatives. Under the JADF an economic affairs committee and a social affairs committee are foreseen. The agricultural platform would be placed under the economic affairs. The experience by the PASNVA project on the embedding of the District agricultural platforms in the general structure of the district administration will provide guidance. It is essential that the platforms will become a recognized body with a clear

mandate within the District institutions. Only then will they be able to fulfill their function in an optimal manner. The National Agricultural Advisory Service Committee (see below) will have as its first mission to assure the recognition of the district agricultural platforms within the administrative system.

Close collaboration with SNV, who will be supporting the JADF through facilitation of their meetings is required in this regard. SNV, with support from the Netherlands embassy, will support the functioning of the JADF in 15 of the 30 districts in Rwanda. Another development partner to complement the work of SNV in the other 15 districts is being searched for and will be the partner for the programme in the remaining 15 districts. Through SNV, collaboration will also be sought with the AgriProFocus' Initiative for the Promotion of Rural Entrepreneurship (IPER; a network of Dutch development organizations and their Rwandan partners)) which facilitates some fifteen multistakeholder platforms in Rwanda around priority value-chains for domestic and regional markets. Furthermore active interaction with other development actors such as DfID supported RIU and the IFAD supported PAPSTA and KWAMP programmes will be sought with the objective of assuring wider use of and link with the District Agricultural Platforms than by the programme alone.

The district platforms will have a more limited portfolio of tasks compared to the current district platforms set-up under PASNVA. It is proposed to limit the tasks of the district agricultural platforms to:

- (i) Articulation and analysis of the demand for agricultural advisory services in the District (see activity 3.2).
- (ii) Enter into dialogue with the District administration, through the JADF, on the needs of the agricultural sector in the District, the synergy of advisory services with other services, specifically credit facilities, the effect of policies on agriculture, and the needs for policy change.
- (iii) Selection of service providers to respond to the demand of producers for advisory services (see activity 3.4).
- (iv) Coordination of the provision of agricultural advisory services in the District.
- (v) Transfer to the Zonal RAB offices needs for agricultural advisory services that cannot (yet) be attended to by service providers available or known at the District level.

Through limiting the tasks of the agricultural platforms it can be avoided that they become heavy bodies, requiring permanent representation, an office and an important budget for their own functioning.

#### Zonal agricultural advisory service teams

At the level of the RAB zonal offices, which are currently being created as part of the restructuring of MINAGRI, Agricultural Advisory Service teams (AAS teams) will be created. These multidisciplinary teams consist of experts in the zonal RAB offices that are involved in the development and support of agricultural research and advisory services. Within the teams there will be researchers on the different priority crops, combined with social scientists, technology transfer specialists, and FFS specialists. The AAS teams will be responsible for coordinating the response at zonal level to the demands for advisory

services coming from the Districts (see activity 3.2).

Within the AAS teams at zonal level the integration of agricultural research and advisory services will have to take shape. This multi-disciplinary team bears the responsibility to: (i) assess and respond to the demands coming from the Districts with regard to advisory services that are not taken care of at the District level; (ii) link with research for innovative inputs (technological innovation); and (iii) monitor and provide technical support to agricultural advisory service providers in their Zone.

The AAS teams in the zones will not only be responsible for responding to the demand in their own districts, but also for coordinating the respond to demand with the other 3 zonal offices. The zonal offices will have, in the set-up proposed by MINAGRI, their own focal commodities important for the agro-ecology of the zone. In case there are demands from the districts for advisory services regarding commodities that fall within the mandate of another zone, the response may have to be coordinated by the AAS team. For the effective coordination between the AAS teams in the four zones central coordination is required from within the national RAB office.

#### National Agricultural Advisory Service Committee (NAASCO)

The National Agricultural Extension Strategy does foresee the creation of a national committee for agricultural extension. The PASNVA project has not initiated this committee, but its Mid Term Review did recommend working on it.

Creation of this national committee is important to assure that the voice of end-users (farmers) and service providers (advisory service providers) are being heard. The main task of the committee would be to formulate policy advice at national level for decision-making with regards to the agricultural advisory service system. Furthermore the committee would also improve the communication between the national level decision makers and the District Agricultural Platforms. Problems that supersede the possibilities of the district platforms and the district administration capacity can be highlighted as being of national importance and relevance by the NAASCO.

#### **Activities**

- Review of the mandate of District Agricultural Platforms and elaboration of clear Terms of Reference.
- Restructuring of the existing 11 platforms.
- Initiation of platforms in the remaining 19 districts.
- Assure embedding and recognition of the District Agricultural Platforms by the district administration and develop links with ongoing similar initiatives.
- Training of platform facilitators (district agronomists).
- Convene quarterly and special meetings of the district platforms.
- Set-up of the zonal Agricultural Advisory Service teams (zonal AAS teams).
- Set-up of the National Agricultural Advisory Service Committee (NAASCO).

• Define the calendar of key events in an annual cycle of planning, monitoring and assessing agricultural advisory services.

#### **Expected outputs**

- 30 functioning District Agricultural Platforms, providing information and input to the district administration and the zonal RAB offices, officially recognized as sub-committees of the district JADF.
- Zonal AAS teams coordinating RAB support to the agricultural advisory system and facilitating research extension linkages.
- A National Agricultural Advisory Service Committee set-up and fully recognized as an advisory and advocacy body.
- A calendar of key events for each of the levels (Districts, Zonal and National).

#### Responsibilities

Actor	Tasks
TA research and extension	Advise on the composition and ToR of the District Agricultural Platforms.
	Provide input into methodology of facilitation of platforms and training of platform facilitators.
RAB national	Advise on the composition and ToR of the District Agricultural Platforms.
	Provide input into methodology of facilitation of platforms and training of platform facilitators.
	Set-up, convene and facilitate NAASCO meetings.
RAB zonal	Initiate the zonal AAS teams and coordinate AAS activities in the zone.
	Provide technical and methodological support to the district platform and its facilitators.
District authorities	Set-up, convene and facilitate District Agricultural Platform meetings.
	Provide day-to-day logistics support to the platforms

#### Set up teams (Zones) and platforms (District JADF committees/working groups):

Consultancies (studies)

Workshops/meetings District (quarterly + 1 special session)

Consultation meetings zonal AAS teams

Training platform facilitators

Set-up and meeting NAECO (2 / year + 1 special session)

Travel budget (car hire, motorbike hire, per diem)

Working budget

### Activity 3.2: Regular demand-articulation and needs assessment for advisory services

#### Rationale

Under this activity the demand articulation, through regular updates of needs assessments according the established calendar of key events, will be organized in each of the Districts. The District Agricultural Platforms, with support from the zonal AAS teams, bear responsibility for the inventory and assessment of demands and needs for agricultural advisory services.

Demand articulation has to be seen as a process that is more than simply asking agricultural producers what they require in terms of agricultural advisory services. The grassroots level producers are in a good position to articulate their own demands, but are not in a position to overview the whole District or long-term trends in markets, nor are they always aware of the latest insights and possibilities with regard to agricultural information. For a quality assessment of needs, a high level of interpretation and analysis of the articulated demand is needed and hence knowledge and skills need to be reinforced.

Interpreting and analysing the demands for advisory services, and translating them into a response that is beneficial to larger numbers of producers requires tools and capacities that are currently not well developed, not at the level of the MINAGRI, nor at the level of the Districts. Under this activity both the AAS teams and the District Agricultural Platforms will be strengthened and equipped to play their role in effective demand articulation.

#### **Activities**

- Design needs assessment methodology.
- Training AAS teams and District agricultural Platforms on needs assessment methodology.
- · Fieldwork related to the needs assessment.
- Aggregate data and information on needs coming from the grassroots level.

- Differentiate needs according to the priority commodity sub-sectors, the different categories of farm households and gender.
- Analyze the needs in the light of market-orientation, value-chain development in the priority commodity sub-sectors, the district development plan and the national agricultural policy.
- Assess whether needs can be met by existing service providers, or whether a larger effort to build service provision capacity is required.

#### **Expected outputs**

- Routine socio-economic segregated and gender sensitive needs assessment and priority setting per district for agricultural advisory services institutionalized.
- Socio-economic segregated and gender sensitive needs assessments are routinely used to design and review District Development Plans.
- Socio-economic segregated and gender sensitive needs assessments are routinely used to allocate human and financial resources for agricultural advisory services.
- District agricultural platforms have organized the key events of the annual cycle.

#### Responsibilities

Actor	Tasks
TA participatory research and extension	Provide input for the design of a socio-economic and gender sensitive methodology for demand assessment by the district platforms  Give methodological support to CICA and the National RAB
CICA/ National RAB office	Design of a socio-economic and gender sensitive methodology for demand assessment by the district platforms  Support the Zonal RAB offices in testing the methodology
Zonal RAB offices	Support the district agricultural platforms in the execution of the gender specific needs assessments (training and coaching)  Assist district platforms in the interpretation of the outcomes of the district needs assessments
District Agricultural Platforms	Implement the needs assessment

Regular demand-articulation and needs assessment for advisory services:
Consultancies & studies
Training AAS ream and district staff on needs assessment
Needs assessment and demand articulation field work
Stakeholder meetings
Consultancy: Client Oriented Agricultural extension
Travel budget (car hire, motorbike hire, per diem)
Working Budget

### Activity 3.3: Inventory and registration of proximity agricultural advisory service providers

#### Rationale

A first requirement for the coordination of the response to the needs of producers for agricultural advisory services is to have a good overview of the organizations that are currently providing advisory services to farmers in each District. Therefore in each District an inventory will be made, and kept up-to-date, by the District Agricultural Platforms with support from the AAS teams. The inventory will preferentially focus on established service providers such as producer organizations, FFS trainers and specialized NGOs with a proven track record in the priority commodity sub-sectors. This should in some years lead to the establishment of a directory of agricultural advisory service providers per Zone on which the Districts and the RAB can rely for establishing a genuine pluralistic agricultural advisory system. The results of the inventory per district will be published in the yellow and white pages of the Agricultural Information Gateway of MINAGRI (AMIS).

A system measuring objective satisfaction scores of clients concerning services provided by agricultural service providers, will be designed.. These scores will then be incorporated in the AMIS system of registration of service providers and kept up to date. Through such a system even individual service providers or small local consortia will be able to build-up a reputation. A simple and locally adapted system for rating service providers' performance by end-users has to be designed, possibly using mobile phone technology.

Only when such an inventory exists the District Agricultural Platform will be able to assess whether the needs that are articulated can be satisfied through the existing service providers, or whether the zonal AAS teams have to consider the development of training curricula and extension materials (activity 4.1) and plan the training of local service providers (activity 4.2).

#### **Activities**

- Prepare pragmatic criteria for service provider registration in the database.
- Making the inventory of service providers per District and Zone, gender disaggregated.
- Initiate a satisfaction rating system for advisory service providers.
- Review and improve the categorization system of service providers in AMIS.
- Publish the information on service providers in the yellow and white pages of AMIS.

#### **Expected outputs**

A regularly updated inventory of service providers, including a satisfaction score by clients of services, published on AMIS

#### Responsibilities

Actor	Tasks
TA training and communication	Provide input for the criteria for service provider inventory and registration
TA participatory extension and research	Advise on the design of a satisfaction rating system
RAB zonal offices	Set the criteria for service provider registration after consultation of the District Agricultural Platforms
CICA / AMIS	Review the yellow and white pages structure and adapt to the needs of the District Agricultural Platforms and zonal AAS teams
	Co-design and implement a satisfaction rating system for service providers
Local consultants	Implement inventory of service providers
District Agricultural Platforms	Validate and use the inventory for service provider selection and approve the system of service provider ratings

#### Resources required

Inventory and registration of proximity agricultural advisory service providers
Consultancies and studies
Documenting service providers in AMIS
Equipment and materials
Travel budget (car hire, motorbike hire, per diem)
Working budget

#### Activity 3.4: Contract agricultural advisory service providers

#### Rationale

Funds are reserved under this activity to be used by the districts for contracting agricultural advisory service providers to respond to the demand for these services identified under activity 3.2.

The District Agricultural Platforms will select the agricultural advisory service providers while the District authorities will actually contract the service providers.

The District Agricultural Platform is responsible for: (i) interpreting and prioritizing demands; (ii) preparing the terms of reference for the provision of service; (iii) identifying suitable service providers while relying on the Zonal directories prepared under 3.3; and (iv) coordinate the provision of services. The terms of reference will also include guidelines for technical accountability by the service providers to the farmers and their organizations and financial accountability toward District authorities. On the short term a competitive tender system will not be envisaged because of the few service providers available and the lack of a level playing field.

The competent District authorities will officially contract the service providers. It thus remains the formal responsibility of the District authorities to: (i) endorse the recommendations made by the platforms; (ii) contract the service providers; and (iii) monitor the implementation of the contract. The District authorities will report on the progress of the implementation to both the District Agricultural platform and RAB.

A first requirement of such a system of contracting services will be the consultation and coordination, under the responsibility of RAB, among projects and programmes which already contract agricultural advisory service providers. This is of utmost importance in order to be complementary, create a level playing field and avoid the creation of an artificial service market that is monopolized by certain service providers and characterized by prices that are beyond the financial capacities of smallholder farmers and their organizations. Some producer organizations have put in place systems of cost-sharing by members who use the services provided by the organization. These promising but fragile systems are easily disturbed by donor funding.

A major constraint for contracting service providers through the fund will be lack of individual agents and bureaus that are adapted to a system of service contracts. Service providers are not necessarily found as rural consultants who are available for hire. It is more likely that service providers are found within existing development projects and producer organizations such as cooperatives and farmer unions. The system that will be developed for the contracting of advisory services by the district administration will have to be adapted to deal with this situation.

The programme will have to pilot different modalities of contracting advisory service provision to find effective and transparent mechanisms that do not damage existing systems of service provision, but add value to the existing situation. Different options will have to be considered for piloting and require to be worked out further under the programme, based on lessons learned within Rwanda and in neighbouring countries. Two different modalities will be tried:

- Vouchers to be used by well-established producer organizations for contracting service providers to reinforce (existing) agricultural advisory services to their constituency. This system will have to be piloted first to assess whether these organizations are strong enough in terms of their management and transparency to assure that the vouchers are used to provide optimal service, rather then being used to provide jobs to relations.
- 2. A local fund for contracting services providers to deliver agricultural advice. The envisagable transaction costs for this, in terms of administration, monitoring and financial management are such that these contracts require a certain size, and the training of a single farmer group by a single service provider is not likely to be of a large enough scale to apply such a system.

#### **Activities**

- Development of a transparent and effective procedure for granting service provision contracts.
- Preparing the terms of reference for the provision of services based on the choices made under activity 3.2.
- Selection of service providers while relying on the Zonal directories prepared under 3.3.
- Coordinate the provision of services.

#### **Expected outputs**

- A transparent procedure developed and in use to channel public funds available for agricultural advisory services.
- Service providers contracted by the districts to answer the needs of farmers.
- An effective monitoring system of service provision in place and used by the district administration.

#### Responsibilities

The details of the responsibilities for the different actors in the system will have to be worked out in the first stages of the project. It is important for reasons of transparency and avoidance of corruption to separate the responsibilities for priority setting and identification of terms of reference, and those for the selection and final contracting and quality control of services rendered between different actors. The district administration, the district agricultural platforms, the JADF and the zonal AAS teams will all have to play a role in this activity.

Actor	Tasks
TA training and communication TA participatory extension and research	Support RAB in design of a transparent procedure for contracting out advisory services
RAB national office	Design with the District administration and zonal AAS teams a transparent procedure for contracting out advisory services
RAB zonal offices/ AAS teams	Support the District Agricultural Platforms in elaborating the terms of reference for service provision, based on the outcomes of the needs assessments
District Agricultural Platforms	Elaborate the terms of reference for service provision, based on the outcomes of the needs assessments.  Propose service providers for contracts to the District authorities
District authorities	Elaborate and sign service provision contracts

Contract private service providers (by RAB/District authorities):
Market-oriented advisory services (local budget)
Administration of contracts
Training district accountants
Monitoring and evaluation by district staff
Travel budget (car hire, motorbike hire, per diem)
Working budget

## Result 4: Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations

Under result 4 the challenge of the insufficiency and weak capacities of proximity agricultural advisors is being addressed. When speaking of local service providers, there is an underlying assumption that these service providers actually exist in abundance and can be contracted with ease to respond to the needs of the producers. The reality is however that these service providers only exist in very limited numbers. In addition most of these service providers are connected to projects with a limited time span. An important group though is the agricultural advisory service providers who are part of producer organizations, providing services to their members. Finally, the quality of the

services they can actually provide is limited and not always up to date.

The different activities that will contribute to obtaining result 4 aim at the development of a pluralistic system in which an increasing class of service providers in all of the 30 Districts is constantly being kept up-to-date with the newest insights from both practice and research. They will be accountable to clients (District authorities) and users (farmers and their organizations) and will be assisted through making available effective extension methods and materials.

Under activity 3.2 needs for advisory services are assessed, and under activity 3.3 an inventory of the advisory service providers available will be made. This will allow for the identification of important gaps in advisory service capacity. Under result 4 these gaps in advisory service capacity are being addressed. This task will be coordinated from the national RAB level and be supported by technical assistance provided through the programme, in conjunction with experts from the CICA.

Much of the implementation of this work will however be executed by the zonal AAS teams. Under the restructured MINAGRI much of the technical, technology transfer and social science expertise will be at zonal level. Currently the expertise available within MINAGRI in the field of adult education, participatory research and market oriented advisory services is limited. This forms an important challenge for building and maintaining a system of effective advisory services. The programme proposes important investments in MINAGRI and future RAB staff, in terms of increasing the number of staff available for building a system of effective advisory services, as well as for on-the-job capacity building. For the capacity building technical assistance is needed, in the form of full time international staff, complemented with tailor-made temporary expertise for curriculum development. To reinforce the capacity of RAB in the zonal offices resources are reserved for MINAGRI to recruit staff, to be absorbed by MINAGRI by the end of the programme.

The Farmer Field School (FFS) methodology is a proven effective method for building the capacity of large numbers of producers through a network of trainers, and a multiplier effect achieved through the training of trainers. Promising experiences have been gained under the current IPM project. Much of the activities under result 4 will focus on the scaling up of the FFS methodology. However, FFS is not the only method for farmer training, and capacity building strategies and other approaches already used by other service providers will be applied. This is one of the key characteristics of a pluralistic system, a basket of approaches which can be drawn on for addressing various situations. Furthermore any approach applied will be supported through the development of relevant training materials and the use of mass media such as radio and television where possible.

### Activity 4.1: Strengthening CICA as a resource centre for agricultural advisory services

#### Rationale

Based on the identified gaps in advisory service capacity extension materials and particularly training curricula will be developed. Training curricula and extension materials require to be developed to answer a direct need by producers and agricultural development practitioners. As such it requires to be done in conjunction with the other activities under this result. In the development of training materials and curricula the zonal AAS teams are instrumental. The expertise in these teams is complemented by the expertise in MINAGRI, and specifically the CICA, in the field of mass communication. It is foreseen that CICA becomes a resource centre at the service of District Agricultural Platforms, the RAB zonal offices and private service providers. It is also assumed that also the expertise in Farmer Field School implementation, and the coordination of farmer field school activities, through the national FFS coordinator, will be part of CICA.

The establishment of a resource centre for information and communication on agriculture in Rwanda, namely CICA, is aiming at supporting the on going process of getting useful information and making it available to multiple actors involved in Agricultural sector and then assisting them to acquire necessary knowledge, skills and attitudes to utilize effectively this information. Under the framework of its first component the PASNVA, *Projet d'Appui au Système National de Vulgarisation Agricole*, has been able to give it a physical home and to give it a face. CICA, *Centre d'Information et de Communication Agricole*, is now established with the MINAGRI carrying the ambition of making it "The" information resource centre for Agriculture in Rwanda. However as newborn centre, with clearly acknowledged potential, it requires additional support and on going strengthening efforts. Under result 4, the capacity of CICA will be strengthened especially for what have been foreseen under the framework of the new support program to SPAT II. This will contribute to one of the pillars of action for sub program 2.2 of PSTAII<sup>5</sup> aiming at improving information side of extension by strengthening CICA as support institution and source of Agricultural<sup>6</sup> information.

Two additional staff should be recruited and supported by the new program using the reservation made of budget for the recruitment by MINAGRI of a number of staff at national level: the Director of CICA (high managerial level) and one expert in audio-visual to be in charge of the CICA audio visual department.

Five departments<sup>7</sup> are now operating under CICA, and become more and more integrated to each other since they have move from MINAGRI building to the CICA

<sup>&</sup>lt;sup>5</sup> "restructuring proximity services for producers"

<sup>&</sup>lt;sup>6</sup> This encompass agriculture, livestock and farming system related information (including socio-economics)

<sup>&</sup>lt;sup>7</sup> Those departments are: the library / the agricultural extension material and development service / the audio-visual material development service / the Information and Communication Technology (ICT) / the GIS.

building in November 2009. Yet further integration and synergies between those services as well as effective and constant linkages to farmers' organisations and extension agents (or AAS structures) are required, which implies close and specific management. This cannot be achieved if CICA services are directly managed by one of the PASTII programs managers. As a result it is recommended to recruit the Director of CICA that would be accountable to the management of the current Single Project Implementation Unit of MINAGRI

Related to the audio/visual department it was assessed that the current staff is not able to respond to the demand in terms of production of training, extension, promotion, sensitisation programs and materials (town meetings, spots, documentaries, radio series etc) and to fulfil management of the demand in a whole. Current staff is mainly absorbed by media coverage linked to public relation of the Ministry. As a result it becomes necessary to recruit one personnel that could be entirely committed to programmes of mass extension messages, deepening the technical as well as socio economical information to be packaged through radio and video (basic technical question, campaign for the promotion of a certain technology, any related information to training programs, success stories in professionalisation of the producers in respect to organizational frameworks, entrepreneurships, commercial linkages and others...). Moreover this person could put more attention than experienced during the lifespan of PASNVA in assessing effect of and satisfaction of end users in line with the expectation of the new programs related to Activity 4.4 and result 58. As a result it is recommended to recruit an audiovisual technician (who would manage the service) to respond to the expected workload for production of audiovisual materials<sup>9</sup> and to strengthen linkages with the "field".

Capacity building is required to improve skills and know-how of CICA staffs and to gain on efficiency and speed in products and service delivery. In the new program more pressure will be put on CICA services to actually answer specific demand for design and piloting production, test and improvement of extension, methodological and training materials. Capacity building must go beyond technical skills and also pay due attention to managerial skills, extension methods as rightly stated in the PASNVA mid term review report. This effort should be mainly done through tailor-made temporary expertise (make use of resources from BTC headquarters and through BTC executed projects/programs)

Area of training to be considered (list not exhaustive):

- Training in adult education and communication;
- Training in participatory research and extension, Agricultural Advisory Services approaches and principles;
- Training on quality assessment of needs. This is related to capacity reinforcement in identifying demand, improving quality and accuracy of the demand for services by producers but also any other actors of the sector like

<sup>&</sup>lt;sup>8</sup> Activity 4.4. : Monitoring of the use and effects of extension materials and training curricula.

Result 5: lessons learned on AAS and seed documented and used in policy and decision-making.

<sup>&</sup>lt;sup>9</sup> Audi/Visual should be considered as the most relevant ways for wider and accessible information dissemination

- research, NGOs, development projects, farmers organizations or cooperatives, associations, public administration, private sector etc;
- Training on production of materials as response to needs identified, in a tailor made support and quality way. It is related to acquisition of analysis and technical skills in production of proper AAS and extension didactic materials (training on management of MIS, library, use of professional software for printed extension material, demand analysis and processing etc.)
- Training on management (ensure training in analysis and planning skills, reporting, M&E for effective implementation of activities -offer of servicescommunication and promotion methods).
- Training on gender mainstreaming applied to the roles and functions of CICA (specific communication needs, taking into account illiteracy, specific training on how to write proposals, facilitate women's access to technologies);
- Training on communication aspects (promoting CICA);
- Training on communication and animation of meetings, workshops;

Training and extension material could be developed along five lines: (i) technologies for the selected crops and value chains for production, storage and processing (technical factsheets); (ii) technologies for cross-cutting issues or themes, e.g. soil fertility management (technical factsheets); (iii) participatory methods for demand articulation and analysis (methodological guidelines); (iv) curricula for training and information on these subjects based on the FFS approach (training modules including guidelines for trainers on adapting the modules to the target group); and (v) audio-visual support materials to effectively use of radio, TV and internet to support delivery of agricultural advisory services. The conceptualization of the architecture of such a set of technical and methodological references is the first step in the process of developing materials.

A provision is made to allow for specific technical assistance for the adaptation and development of training curricula. There is broad expertise in neighbouring countries, as well as in international organizations. This expertise is an important asset in the development of curricula, and allows for fast adaptation of existing curricula from other countries with similar agro-ecological conditions to the specificities of Rwanda.

CICA will also have an important role in liaising and coordination: liaising with RAB extension experts and researchers in order to update technologies and bring in new technologies; and coordination of training of RAB staff and private sector agricultural advisory service providers. The first activity requires ad hoc technical committees including researchers to develop technical fact sheets. The second, coordination role needs specific attention since not all the training of trainers foreseen could be implemented by CICA alone. It can therefore rely on regional and national trainers with a proven track record.

The CICA will furthermore through this programme provide assistance and expertise to the development of community information centers and farmer training centers that are being implemented by other programmes (i.e. IFAD supported PAPSTA and KWAMP projects). This programme will not in its own right initiate such permanent training centers.

Investing in permanent infrastructure for training would, in spite of the substantial budget of the programme, not be possible without compromising the ambition of national system building. However, the programme will, where logistically possible, use the available innovation and training centers for demonstrating new technologies and to conduct training of trainers activities, and thus support the functioning and use of these centers.

CICA must be seen as a support centre for Information and Communication to all actors involved in agriculture and livestock sector, covering from technical to socio-economics aspects. CICA must serve FFS service providers as well as other partners and all aspect of agricultural advisory services or extension. In other words CICA should be able to react to new development in agriculture & livestock and needs in agricultural advisory services by providing all proximity service providers, FFS facilitators, District agronomists, producer organizations and NGOs.

#### **Activities:**

- Consult local partners (MINAGRI, RAB, District Agricultural Platforms, established agricultural advisory service providers, development projects, producer organizations) on the expected role of CICA and the needs for support (needs assessment);
- Identify and facilitate punctual consultancies to build curricula for CICA services capacity building ("approche par compétence")
- Elaborate CICA development plan, including a specific plan for strengthening human and organizational capacity of the CICA as well as a clear communication strategy to become an effective resource and support centre;
- Tailor made temporary expertise training CICA staff
- Prepare training materials based on needs assessments and for direct use in training of trainers activities.
- Execute development plan, especially capacity building plan and promotion of CICA;
- Contract expertise for AMIS database adaptations and improvements, library service delivery improvement, extension materials productions improvement;
- To assure the publicity of CICA services to increase number of users/clients and collaborators;
- Elaborate and implement the business plan accordingly including architecture for future technical and methodological reference material;
- Prepare methodological guidelines and tools for needs assessment for advisory service to be used by DAPFs supported by Zonal RAB;
- Prepare extension and training materials especially related to training programs, based on needs assessments.
- Prepare complete Farmer Field School training curricula for priority problems of selected crops.

- Update training and extension materials.
- Link with other programs, like CCI, telecentre etc, which can be instrumental in making information available widely.

#### **Expected outputs**

- Development business plan for CICA.
- Needs for CICA organizational strengthening and capacity building identified;
- Expertise of CICA services reinforced;
- Architecture of technical and methodological reference material.
- Needs for support to different actors of the Agricultural sector identified;
- Tools for assessing needs for advisory services;
- Technical fact sheets on priority crops, livestock and cross cutting themes.
- Methodological guidelines for using and adapting training materials.
- Gender specific materials for training of service providers and FFS trainers in participatory research and development methods and tools.

#### Responsibilities

Actor	Tasks
TA training and communication	Support the CICA team in elaborating its development and business plan;
	Advise during the implementation of the plan (development of materials, linking with national and regional actors etc.)
	Facilitating capacity building process (on the job, tailored made temporary expertise, selection of course);
TA research and extension	Advise during the formulation and implementation of the plan Facilitate linking between research, extension and CICA Facilitating capacity building process
CICA	Assess and prioritize the needs for methodological tools and training and extension materials;
	Elaborate and test extension and training materials  Develop relationships and network with national and abroad expertise (in the field of information, communication and AAS).
RAB national	Provide input for the formulation and implementation of the CICA development plan
	Facilitate liaison between levels (District/Zonal/National) and actors (research and extension)

RAB	zonal	Provide input for the formulation and implementation of the CICA
offices/AAS	teams	development plan
and	District	
Agricultural		
Platforms		

Development of extension materials and training curricula
Consultancies and studies
Development of FSS curricula and other training curricula
Development methodological materials (on needs assessment)
Development of printed training and extension materials
Development of Audio-visual support materials (to trainings and extension)
Audio-visual support to trainings
Field testing of training materials and curricula
Travel budget (car hire, motorbike hire, per diem)
Equipment and materials

### Activity 4.2: Training of proximity agricultural advisory service providers

#### Rationale

To mitigate the problem of the limited availability of service providers the programme will, parallel to contracting of service providers (see activity 3.4), also invest in the building of a class of agricultural service providers for those topics that have been prioritized.

The number and capacities of proximity advisory service providers needs to be improved. This is an important responsibility of the zonal AAS teams with the coordinating support of CICA. Through this activity new service providers will be trained, while existing service providers get the opportunity to update their knowledge and improve their methodological capacities. For the implementation of this activity, the programme will specifically build on the existing approach and competencies of the FFS project that will integrate and strengthen CICA.

The scaling up of the FFS approach will be based on two principles: developing training and extension material for all priority crops selected and key cross-cutting issues (so-called basic training modules) and first line trainers-of-trainers, selected from the directory of service providers in each Zone (see activity 3.3). These trainers-of-trainers would be embedded in existing institutions and organizations that can be contracted and/or funded through funds provided under the programme (see activity 3.4). Priority will be given to producer organizations that have a proven track record on developing sustainable

agricultural advisory service provision (e.g. experienced staff available, services provide on a cost-sharing basis etc.).

Within the farmer field school methodology training of trainers is a well-developed component as described in chapter 1.3.1.6. Through a first intensive course first line trainers from different sides of the country are trained. These trainers establish their first farmer field school while being trained. From these first farmer field schools the second line trainers can be selected. They will be trained locally as trainers by the first line trainers, and also start practicing, initially in pairs and after a first run-through alone, the facilitation of a farmer field school. Supervision will be provided by the first line trainers. This results in a short time in a class of FFS facilitators, capable of delivering services to agricultural producers.

A total of 300 service providers will be trained as first-line FFS trainers under the programme. In addition a total of 1200 second line trainers will be selected to be trained as FFS facilitators, based on their performance in the FFS group, and their ambitions to become a facilitator (see annex 7.9). As a result of these efforts the number of practicing farmer field school facilitators will increase importantly through whom advisory services become available. Through the district agricultural platforms additional demand for FFS training can be expressed and the FFS facilitators trained can be contracted to provide services, in addition to the 2.350 FFS planned under activity 4.3.

These new agricultural advisory service providers, as well as existing advisory service providers require regular support to remain abreast of the newest developments, and to be able to continuously provide the best possible services. The zonal AAS teams, with support from central level, bear the responsibility to react to new development in agriculture and agricultural advisory services by providing the proximity service providers, such as FFS facilitators, District agronomists, producer organizations and specialized NGOs with the latest insights. The zonal AAS teams will organize so-called refresher courses and specific capacity building efforts on new topics becoming important (so-called update courses) to assure that agricultural advisory service providers continuously improve their capacity.

#### **Activities**

- Define a calendar for the key moments and periods for assessing training needs, training of agricultural advisory service providers and coaching of trainees for each of the Zones (in line with the calendar defined under activity 3.2).
- Regular update of the assessment of training needs of the various groups of service providers.
- Training of FFS facilitators, 1<sup>st</sup> and 2<sup>nd</sup> line.
- Organize refresher and update courses for service providers and FFS trainers.

#### **Expected outputs**

A calendar of key events for each of the levels.

- 300 1<sup>st</sup> line and 1200 2<sup>nd</sup> line FFS facilitators trained with at least 40% of women participation.
- 540 trainers received refresher courses with at least 40% of women participation.
- Annual updates of training needs (per Zone and groups of service providers).

#### Responsibilities

Actor	Tasks
TA training and	Advise on organizing and conducting training sessions
communication	Provide input for didactics, supports etc. on adult training.
CICA	Coordinate and provide support to training sessions within the Zones by Zonal AAS Teams and third parties
RAB national office	Provide input from research and policy makers for training sessions
RAB zonal offices/AAS teams	Coordinate and organize training sessions for service providers in their respective Zones
Agricultural Advisory Service Providers	Identify and propose trainees for basic training and update sessions
District Agricultural Platforms	Provide input for the update of training needs

#### Resources required

Training of local service providers
Consultancies (FFS master trainers)
Training of trainers FFS curricula (1st line)
Training of trainers FFS curricula (2nd line)
Refresher or specific courses service providers
Development of FFS curricula
Equipment & materials
Travel budget (car hire, motorbike hire, per diem)
Working budget

#### Activity 4.3: Farmer training and advice

#### Rationale

The actual training of and advice to farmers is the full responsibility of agricultural advisory service providers that benefited from (financial and technical) support by the programme. Through the District fund or the voucher system they deliver advisory

services to farmers. Service delivery will be organized in two ways: (i) as a response to the demands and needs that have been assessed by District Agricultural Platforms and (ii) as anticipation on issues that are considered of strategic importance by decision-makers (e.g. threats of plant and animal diseases). In the first case, the training and advice of farmers will be implemented with the help of the local fund and/or voucher system (see activity 3.4).

In the second case, national and zonal level larger issues, important across Districts, will be identified as important areas for farmer information, training and advice. Through 'updating' farmer field schools, demonstrations and the use of mass media, sensitization and training campaigns will be initiated that reach substantial numbers of farmers. These activities will also be funded through the local fund in order to avoid the distortion of the system. In fact, platforms can decide to integrate such issues into the local programmes since they have then become part of the national policy orientations (see activity 3.1).

The farmer field school methodology will primarily be used for farmer training as it has a multiplier effect and is suitable for reaching substantial numbers of agricultural producers and assisting them in improving their production. However, FFS is not the answer to all capacity building needs of producers, and other methods can be used. The identification of the best approach for each priority identified is the task of the national level experts in the field of agricultural extension, in close conjunction with the zonal AAS teams.

A total of 2350 FFS is planned to be executed during the programme, which reaches an estimated number of 80,750 producers, provided the average number of participants per group reaches 25. In addition two training sessions for farmers per district per year are budgeted on other subjects, which can be initiated at the initiative of the zonal AAS teams (see annex 7.9).

#### **Activities**

- Implement farmer field schools
- Implement other farmer training sessions
- Monitor the implementation of the agricultural advisory service contracts.
- Update rating of service providers.

#### **Expected outputs**

- 2400 Farmer field schools implemented
- At least 240 other farmer group trainings implemented
- Updated ratings of service providers.

#### Responsibilities

Actor		Tasks
Agricultural Service Prov	•	Coordinate and organized training sessions, farmer field schools, demonstrations etc. for farmers
District Platforms	Agricultural	Monitor the service provision to farmers

	Update rating of service providers (see activity 3.3)
District authorities	Implement the contract: assure payments of service providers
	Monitor the implementation of the service provision contracts: legal and financial aspects
Zonal RAB offices	Monitor the service provision to farmers
	Assist district platforms in the rating of service providers

Farmer training			
Farmer field schools			
Other farmer training			
Participatory research with farmer groups			
Travel budget (car hire, motorbike hire, per diem)			
Working budget			

### Activity 4.4: Monitoring of the use and effects of extension materials and training curricula

#### Rationale

The effects and use of different training methods, materials and curricula that are being developed require to be monitored professionally. Under activity 4.4 all of the efforts made under activities 4.1, 4.2 and 4.3 are monitored for relevancy, effectiveness and effects. The monitoring has two objectives. The first and most important objective is to allow for the adaptation of the approach, method or training material developed and hence to improve quality. Secondly the monitoring is meant to assess whether the efforts do reach the intended end users. Specifically the gender equality as well as the equality in terms of income categories will be monitored.

Monitoring will be organized along two lines: (i) regular feedback from clients, service users and trainees immediately after training sessions or a series of sessions on the relevancy and effectiveness of methods and tools used and (ii) punctual in-depth surveys among end users on the effectiveness and effect of information provided and methods that were used. CICA will play a central role in developing the tools in order to improve the training and extension materials that it developed. Most important will be though the use and integration of the monitoring tools by RAB in order to provide it with information and data for adapting and improving its policies and strategies. Equally, the information generated by the monitoring system can be used by the District Agricultural Platforms, Zonal AAS teams and NAASCO to assess its way of working.

#### **Activities**

 Develop monitoring tools for regular feedback on the use of training and extension materials.

- Elaborate terms of reference for in-depth surveys among end-users of agricultural advisory services.
- Implement in-depth surveys.
- Present and discuss results from regular feedback and in-depth surveys.

#### **Expected outputs**

- Monitoring tools for regular feedback
- Feedback reports
- Survey reports

#### Responsibilities

Actor	Tasks				
CICA	Develop monitoring tools				
	Present feedback results in platform, team and committee meetings				
	Adapt training and extension methods and tools				
RAB national and zonal offices	Elaborate ToR for in-depth surveys Organize expert meetings on survey results Adapt training, extension and advisory strategies and programmes				
Consultants	Conduct in-depth surveys				

#### Resources required

Monitoring of the use and effects of extension materials and training curriculum			
Consultancies (surveys)			
Travel budget (car hire, motorbike hire, per diem)			
Working budget			

# Result 5: Lessons learned on agricultural advisory services and seed documented and used in policy and decision-making

Result 5 will be achieved if the lessons learned during the implementation of the programme are documented and used in the first place to improve the programme itself, and secondly to inform policy and decision makers on subjects related to seed and agricultural advisory services.

Different activities related to monitoring and evaluation of the programme are united under this result 5. It should however by all means be avoided that this result is seen as a separate component of the programme, that can run on its own. The monitoring and

evaluation is an integral part of the programme, and will have to be used to guard the quality of the programme, and assure readjustment is done timely and adequately once this is deemed necessary by the programme actors.

An important strategy to safeguard against a separate and not well integrated monitoring and evaluation component is the direct involvement of the main project actors in the monitoring and evaluation. It should not be contracted out to external consultants, but be implemented as much as possible by MINAGRI staff working on the programme. Specific smaller and precise studies can be contracted out, but the coordination and analysis of results should maintain the responsibility of the programme staff.

Specific outside support can be contracted for the duration of the programme to assist MINAGRI in the design and implementation of a coherent M&E framework for this programme.

Four different activities together contribute to achieving result 5. Activity 5.1 consists of the baseline survey and end-of-project survey, which are essential to monitor the programme achievements. Activity 5.2 focuses on documenting the lessons learned by the programme actors, in the first place to improve the quality of the programme itself, and secondly to inform other programs in Rwanda and abroad. Activity 5.3 focused on using the lessons from programme for evidence based policy and decision making. Activity 5.4 is specifically aimed at assuring that this programme does contribute to the development of a sector-wide gender policy and action plan, and leads in applying the consequences of this policy in the context of the programme.

#### Activity 5.1: Baseline study and end of project outcome assessment

#### Rationale

As a part of the programme a well-focused baseline study has to be implemented in order to assess the starting situation. This is important in the first place to understand the existing use and availability of quality seed and advisory services. Secondly to be able to assess during and at the end of the programme the progress that has been made. More specifically the baseline will allow for the quantification of performance indicators of the programme.

At the end of the project life a thorough project outcome assessment will have to be implemented to establish the contribution of the programme to the building of durable seed and advisory service systems. It is deliberately not called an impact assessment here, as the ultimate impact of the durable systems the programme aims to establish will be hard to measure, as it depends on many more factors than those tackled by this programme alone.

#### Seed component: results 1 and 2

For results 1 and 2 it is important to realize that the ultimate objective of the seed component is the use of quality seed by agricultural producers. This cannot be measured solely, as suggested in the SPAT II, by the amount of certified seed produced. In the first place certified seed is only a component of the seed system. Quality seed does not

necessarily have to be certified. Secondly, it is not the availability of quality seed that counts, but the economic use of quality seed. The ultimate indicators of success are the lowering of production risks, increase in food security and the increase of profitability of production. The baseline should in a focused and smart manner assess the starting situation of the economy of different important seed systems, and compare that to the situation by the end of the project. It is important to make choices for a limited number of qualitative and quantitative indicators, rather than attempting to map the complete situation of the seed economy of all priority crops.

The steps to be taken to come to a limited set of data to collect in the baseline survey:

- 1. Choose 3 example crops (for example maize, potato and banana, being priority cereal, tuber and perennial food crops)
- 2. Select for these crops 2-3 districts for data collection
- 3. Record data on the source, prices and volumes of certified and informal seed at farmer level
- 4. Record data on the prices and volumes of produce of these crops sold to the market and consumed at home
- 5. Assess the opinion and ideas of producers and other stakeholders on the availability of affordable quality seed

#### Advisory service component: results 3 and 4

In the design of the baseline study for the advisory service component two elements should be included. In the first place the level of satisfaction by end users of advisory services. Although this is difficult to establish, at least in the end-of-project outcome assessment it should be assessed whether the end-users of advisory services have experienced an improvement over the course of the programme.

Secondly the baseline and outcome assessment have to measure the availability and reach of advisory services, and especially the number and capacity of advisory service providers in all of the districts. Currently both the number and the capacity of advisory service providers are inadequate to effectively respond to the demand of producers. It is essentially this problem that the programme seeks to address.

Steps to be taken to come to a limited set of data to collect in the baseline survey:

- 1. Select a number (3-4) of sample districts for data collection
- 2. Quantify the current number of agricultural advisory service providers (relate to activity 3.3) in terms of full time equivalents of services provided to calculate the ration between service providers and agricultural producers
- 3. Assess with randomly selected producers the current advisory services available compared to the demand for such services in relation to the above selected crops
- 4. Assess the opinion and ideas for improvement of producers with regard to advisory services for these selected crops.

#### Gender specific baseline and outcome assessment

Especially in the baseline study and the outcome assessment study it is essential to assure gender and wealth class specific data collection. The improvement in access to advisory services and quality seed as a result of the programme should specifically benefit women and the less well-off farmers, or at least assure ample representation of these groups among the beneficiaries of the programme.

Rather than assuming that the interventions are gender and wealth class neutral, this has to be monitored actively. This starts with a baseline collecting data in a gender and wealth class stratified manner.

#### **Activities**

- Meeting to design the baseline survey (combined with meeting under activity 5.2)
- Implementation of the baseline survey
- Meeting to discuss the consequences of the results of the baseline survey for the project activities and indicators for monitoring and evaluation
- Meeting to design the end-of-project outcome assessment.
- Implementation of the project outcome assessment

#### **Expected outputs**

- Baseline survey report, including quantified programme success indicators
- End-of-project outcome assessment report

#### Responsibilities

Actor	Tasks						
Programme management	Provide leadership in the design of the baseline study and end-of-project outcome assessment						
TAs	Provide input on advisory services and seed system M&E						
Programme implementers	Participate in the design and implementation of the baseline and end-of-project outcome assessments						
Local consultants	Execute precise data collection, if required						
Punctual technica assistance	Facilitate meetings to design the baseline and end-of-programme outcome assessments						

Baseline study and end-of-project outcome assessment
Baseline study
End of project outcome assessment
National meeting to present baseline
Regional meeting presenting project outcomes
Travel budget (car hire, motorbike hire, per diem)
Working budget

### Activity 5.2: Development and implementation of an M&E for learning framework

#### Rationale

The implementation of the proposed programme is complex. The ultimate objective of the programme is not simply to execute the planned activities, but to build a functioning system of quality seed production and use and a functioning system of advisory services for agricultural producers. Building durable systems which continue to function beyond the lifetime of the programme is a learning process. There are no foolproof guidelines or a recipe for successful implementation of the proposed activities. Much will depend on the capacity of the staff involved to learn from the experience, and adjust activities and approaches during the programme based on the insights gained.

To make this a reality a strong and well managed monitoring and evaluation program, not only focused on the documentation of achievements for the sake of accountability towards the donor and the Rwanda government, but also focused on drawing lessons from the implementation, and adjusting the direction of the programme on the basis of these.

To assure that the actors in the programme take the time and effort to reflect on the lessons learned from the implementation of the programme, and specific M&E for learning framework will be implemented under this activity. Under this framework task forces responsible for and directly engaged in the activities of the programme will meet at regular intervals. Separate task forces are proposed for the seed related and the agricultural advisory service related activities. Members of the task forces should predominantly be involved directly in the implementation of the programme activities. The intervals will be maximum six months, but at the start of the programme a 3-month interval is used. During these M&E for learning meetings the task forces will look back at the experiences of the last interval, assess the lessons, and plan for the next interval. Based on the past experience specific amendments of activities and indicators defined in the project logframe are identified and proposed to the project management and steering committee.

Through the M&E for learning framework the programme will become dynamic and able to adjust quickly and effectively to new insights. This will avoid a situation in which the programme implementers will interpret the programme logframe and this TFF document as their implementation guide, without due reflection on the preferred direction of the programme.

The project task forces will also address the measurement of programme impact. During their M&E sessions they will design a system of measuring change as a result of the programme. The indicators that will be used will be a mixture of qualitative and quantitative indicators. They will be measured progressively through the time span of the programme, and complement the more quantitative baseline and project outcome studies.

#### **Activities**

- Design of the M&E for learning framework in a programme start-up workshop (combined with the design of the baseline survey of activity 5.1)
- Initiation of 2 programme **task forces**, one for the Agricultural Advisory Services (AAS task force) and one for the Seed task force.
- Regular meetings of the programme task-forces assessing the programme progress compared to the set indicators, but also critically looking at the activities and indicators themselves.
- Formulating adjustments to the programme DTF to be endorsed by the programme steering committee.
- Documenting experiences of the programme, including gender experiences and approaches.
- An end-of-programme workshop to document the main findings.

#### **Expected outputs**

- Regular well substantiated and documented changes to the programme suggested to the steering committee
- Complete documentation on programme experiences and lessons
- An end-of-programme publication of lessons learned and achievements made
- Communication and dissemination strategy within stakeholders and donors

#### Responsibilities

Actor			Tasks				
Programme management		nagement	Appoint programme task forces				
Seed and advisory		advisory	Participate in M&E for learning meetings				
service	task for	ces					

TAs		Participate in M&E for learning meetings								
Punctual assistance	technical	Design impleme			for	learning	structure	and	facilitate	its

Experience based policy making:
Studies for policy briefs and advise
Presenting policy issues
Materials
Policy review workshops
Travel budget (car hire, motorbike hire, per diem)
Working budget

#### Activity 5.3: Experience based policymaking

#### Rationale

Strategy documents and policies are dynamic. They need to change and adapt based on new developments and insights gained by practitioners. Based on the experiences of the past projects as well as the insights of this new programme the seed strategy and the national agricultural extension strategy require to be updated.

Updating the seed strategy can be planned in close conjunction with the FAO funded initiative that is planned for the improvement of the quality control of certified seed production. Care has to be taken to give due attention and opportunity in the seed law and the seed strategy for the different types of quality seed that producers require.

The National Agricultural Extension Strategy was written at the onset of the PASNVA project and adopted. Since its elaboration important experience has been gained with the implementation of the strategy, and some of the insights gained require to be reflected in the national strategy.

Under this 5-year programme two revisions of both strategies are planned. The first at the onset of the programme, based on the experiences gained during the previous projects, and a second revision is planned for the end of the programme, building on the new developments and lessons gained form the implementation of the programme.

#### **Activities**

- Update the Rwanda national seed policy at the start of the programme based on the insights of the AFSR project, and again by the end of the programme.
- Update the National Agricultural Extension Strategy (NAES) at the start of the programme based on the insights of the PASNVA project, and again by the end of the programme.

#### **Expected outputs**

Up-to-date policies seed and agricultural advisory service policies based on evidence from practice

#### Responsibilities

Actor	Tasks			
National agricultural advisory service committee (NAASCO)	Update the NAES			
RAB national	Convene seed system stakeholders for seed policy update			
Seed chain managers	Participate in seed policy update Provide insights documented through activity 5.2 for seed policy update			
CC-AFSR	Participate in seed policy update			
Zonal AAS teams	Participate in update of the NAES			

#### Resources required

Development and implementation of an M&E for learning framework			
M&E for learning meetings of programme implementers			
Consultancy M&E for learning			
End of programme write workshop			
Travel budget (car hire, motorbike hire, per diem)			
Working budget			

### Activity 5.4: Contribute to the formulation and implementation of a national sector-wide gender strategy and action plan

#### Rationale

This activity will contribute actively to the formulation and implementation of a national sector-wide gender strategy and action plan for Minagri. The project staff will be represented and actively support this initiative that will be taken at the level of MIGEPROF.

Furthermore the programme will align to the national strategy and action plan as far as it concerns the activities that are the mandate of the programme. Based on the strategy it will help to formulate, the programme will mainstream gender in its activities, and contribute to the mainstreaming of gender in the whole of MINAGRI. The programme will however not assume the sole responsibility for gender mainstreaming in MINAGRI as this has to be initiated and driven by MINAGRI, and not by a special programme within

MINAGRI that has as a focus advisory services and seed quality improvement.

#### **Activities**

- Participate actively in the elaboration of the gender strategy of MINAGRI
- Contribute to the formulation of the MINAGRI gender action plan
- Assist the gender focal point (Minagri) and provide capacity building

#### **Expected outputs**

Up-to date gender approach regarding seeds and extension policies, integrated in the new gender strategy and action plan for Minagri

#### Responsibilities

Actor	Tasks
RAB national	Participate in gender policy elaboration
	Involve gender focal point in programme activities
	Assure the gender dimension is integrated in a structural manner in all monitoring and evaluation
MINAGRI gender focal point	Assist in assuring the alignment of the programme with the national gender policy and the gender action plan

#### Resources required

Contribute to the formulation and implementation of a national sector- wide gender strategy and action plan
Participate in national gender strategy meetings
Organization of events
Training on gender budgeting
National consultancies
Travel budget (car hire, motorbike hire, per diem)
Working budget

#### 3.5 Programme duration

The programme's activities will be implemented during five years within a specific agreement of 6 years.

The bulk of the activities will be mainly concentrated during 4 years, after a starting period of several months, and before an ending period of around 6 months.

Because the new MINAGRI structure is not yet operational, a programme implementation assessment will be conduct jointly, after 12 months. This will give the opportunity to adapt the implementation framework of the programme is needed.

Following the division of labour Belgian Cooperation will not remain in the agriculture sector, an phasing out period is necessary, not only for the closing process of the programme, but also for implementing the exit strategy.

#### 3.6 Indicators and means of verification

#### Result 1:

Seed production chains of specific groups of food crops with a market value are professionalized.

The performance in this result area will be measured through the increase in the production of quality seed in the six seed chains with identified crops (see activity 1.1).

Quality seed is determined here as the registered production of certified and quality declared seed. The seed chain managers for the different groups of crops, who are stationed at the zonal RAB offices will have to record the production of quality declared seed, while the production of certified seed will be registered by the seed certification unit. The seed task force, formed under activity 5.2, will have the task to monitor progress towards this result during the programme execution

#### Result 2:

Increased private sector involvement in the seed sector.

The achievement of result number 2 will be monitored as a function of the increase in market share that the private sector has for the seed chains identified.

In the baseline survey this will be recorded for 3 selected crops. Furthermore this will be recorded in the seed economy studies that will be implemented as part of activity 1.1. During the end-of-project outcome assessment this will be recorded once more to monitor the change in private sector market share in the different stages of seed production.

The targets for private sector involvement will be different for the different groups of crops. This will be elaborated in the specific strategy for each group of crops. The seed task force, formed under activity 5.2, will have the task to monitor progress towards this

result during the programme execution.

#### Result 3:

Sustainable mechanisms for demand articulation and responsiveness of market-oriented advisory services.

The achievement of result 3 will be measured through the functionality and related outputs of the district agricultural platforms as demand articulation mechanism for agenda setting by the district administration, development projects, zonal MINAGRI/RAB offices and NGOs.

Furthermore the availability of up-to-date needs assessment results, and its use in the allocation of resources for advisory services, is an indication of the functioning of the system.

These performance indicators are very much qualitative. The achievement of the result will be measured using the district agricultural platform reports (based upon an agreed upon standard format for all platforms) and specific attention to this will have to be given in the end-of-project outcome assessment. Furthermore it will be monitored actively by the AAS task force as part of the M&E for learning activity (activity 5.2)

#### Result 4:

Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations.

The achievement of result number 4 will be measured as a function of the increase in the number of practicing non-public advisory service providers, the number of active groups of farmer field school graduates and the number of farmers trained for each of the prioritized crops in a District.

The increase in service providers per district could be measured by comparing the inventory that will be done under activity 3.3 with a renewed registration of service providers by the end of project, as part of the end-of-project outcome assessment. As suggested under activity 5.1, it would be wise to limit a detailed assessment of the achievement of result 4 to a limited number of sample districts, rather than measuring intensively in each of the 30 districts.

The AAS task force that will be formed as part of the M&E for learning activity (activity 5.2) will have a responsibility to monitor the progress towards achievement of result 4.

For the result 3 and 4, the number of district as such is not an achievement indicator, but the sustainability of the system.

#### Result 5:

Lessons learned on agricultural advisory services and seed supply services documented and used in policy and decision-making.

The success in relation to result 5 will be assessed on the basis of reference to the documented project lessons in policies, strategies and action plans related to advisory services and seed sector improvement. This has to be realized first and foremost in the NAES and the national seed policy.

Furthermore result 5 will contribute to the smooth implementation of the programme and fast and effective adaptation of programme activities when required. This can be monitored through the reports of the two programme task forces, in which regular recommendation are given for programme adjustment. Also the reports of the programme steering committee, which has to endorse the recommendations for adaptation of programme activities proposed by the task forces, will reflect whether result 5 is being achieved.

Finally the achievement of result 5 can be measured as a function of published experiences resulting from the programme, for use within Rwanda and beyond.

# 3.7 Risks and hypotheses

## 3.7.1 Implementation risks

#### 3.7.1.1 General implementation risks

The most important implementation risk is to resort to a project style implementation of the initiative as compared to a programme approach in which the existing structures and procedures are used while making sure that the systems to be built (seeds and advisory services) are aligned with the structures and procedures. Resorting to a project style implementation would not contribute to the building of a durable system of agricultural advisory services and seed supply services which continues to function beyond the lifespan of the programme.

An important risk is the District capacity absorption rate, the District slow tender management and the District financial management. Some district might be overloaded by other project and will not have the needed technical and administrative capacity. Some district capacity development projects are financer by other donors (EU, SNV). The programme will support District contract management and periodic District meeting.

Another implementation risk is that as a result of a limited tangible impact, there will be strong pressure to alter the programme approach and objectives, and rather than focusing on building durable systems, the programme will resort to quick-fix thinking and putting more emphasis on investment in infrastructure rather than system building.

## 3.7.1.2 Seed component: results 1 and 2

A first risk under the seed component is that there would not be entrepreneurs who are willing to invest in seed multiplication capacity for the long term. The programme can mitigate this risk by, as proposed, assisting the private sector in implementing feasibility studies to show the profitability of investments.

The Government of Rwanda will have to assure a favourable climate for private investment and entrepreneurship, allowing and actively stimulating entrepreneurs to take a share in the market, which is currently dominated by public institutions. The public institutions currently involved in seed production will have to start producing at cost recovery basis to assure a level playing field for seed entrepreneurs who enter the market. In case the emerging private sector is not able to fulfill its role as distributor and marketer of certified seed (see activity 2.2), which is expected especially during the first 2 years of the programme, the Rwanda Seed Enterprise, could also engage in certified seed marketing, assuring the production through contract farming. Thereby it will take a facilitating role promoting professionalism and growth in the seed sector.

The Government of Rwanda can further stimulate the emergence of Rwandan seed entrepreneurs by buying from these multipliers rather than purchasing seed from abroad. The seed system strategies for the different groups of crops will have to pay attention to buying locally versus import.

The FAO will initiate a separate project to improve seed quality control, and enforce the Rwanda seed law. The danger of an isolated project on seed certification is that it focuses on certification as the goal, rather than the availability of affordable quality seed to producers. The activities proposed by the FAO project will add value to the here proposed programme, provided that both the seed law and the implementation of the certification system do allow for different types of seed to continue to contribute to serve producers with the seeds they want and the quality they can afford. Furthermore it is essential that the FAO intervention recognizes the same diversity in terms of needs and opportunities for different crops, rather than proposing a blanket approach for food crops. As such the close collaboration with, and embedding in the larger programme of this project on seed quality is important to assure the best possible synergies.

An important risk for privatization of a number of roles currently played by the public system is resistance to change by decision makers within the public system. There can be several reasons for resisting to change. The first reason would be fear of the unknown, and a genuine concern that the private sector cannot deliver quality seed supply services. A second possible reason for resistance to change is a loss of influence on the seed supply system, which may be perceived as a threat to job security and privileges. To reduce the resistance to change it is important to collaborate closely with the direct actors in the public system, and assure they have the opportunity to play a similar role in new more independent structures. Furthermore it is essential that the changes in public roles in the seed sector continue to receive support form the highest administrative and political levels.

A last risk is in the approach currently used by the Crop Intensification Programme (CIP). Until now the CIP has not been able to effectively involve private entrepreneurs in the distribution and commercialization of inputs, including quality seed. If the CIP continues to distribute seeds through its own channels, by-passing emerging private entrepreneurs and seed producers, these local entrepreneurs and seed producers will not have a chance to develop. It is of paramount importance to collaborate with the CIP and the IFDC CATALYST projects to make sure that in joint effort local entrepreneurs will be involved in the commercialization of inputs, including quality seeds.

#### 3.7.1.3 Agricultural advisory services component: results 3 and 4

The first risk in the implementation of the activities under result 3 and 4 is a conflict between the central supply driven system and the decentralized demand driven system. The central system will be based on the zonal RAB offices and answers to the national RAB office of MINAGRI, while the decentralized system is managed at district level and consists of the District and Sector agronomists who answer to the District administration. Together they have to manage the public efforts to build an effective agricultural advisory system. To support a smooth collaboration it is essential that the national and zonal RAB offices will be closely involved in decision making and activities of the programme and that they get a clear mandate to support the district level implementation of the programme. A related risk is the limited availability of already overburdened district and sector agronomists. It is essential that the programme is well discussed, embedded in and aligned with the district priorities. To achieve close collaboration with the JADF and

the district administration is important.

A second risk is a lack of coherence in approach between donors and programs in relation to agricultural advisory services. All donors, projects and programs ultimately work with the same limited pool of advisory service providers. Harmony in demand articulation, remuneration of service providers and contractual arrangements is import for building a functioning and cost effective system. Particularly CIP, through MINAGRI, needs to be involved since this is a national programme that outsources input supply (fertilizer, seeds) with advisory services around the land consolidation schemes. The synergic approach offers interesting experiences for the construction of the Rwandan agricultural services system. This requires first of all a strong coordinating role of MINAGRI/RAB under which this support program and CIP, and secondly the recognition of the articulating role of the District Agricultural Platforms. Furthermore it is essential that all interveners do pay attention to and invest in enlarging the number of quality service providers to assure the costs are proportional to the rural economy, and service will become affordable to agricultural producers possibly with modest subsidies through donor and public funds.

The third risk that was identified is a delay in the reforms by MINAGRI. The programme does rely largely on MINAGRI for its implementation. The implementation modalities are based on the new structure with a concentration of expertise in the zonal RAB offices. To mitigate this problem substantial budget has been reserved for MINAGRI to hire in additional manpower to reinforce the zonal offices with staff in the field of agricultural advisory services to support the programme implementation in the districts. An important element in the reform is the future and institutional anchoring of CICA that still is being perceived as a project-related facility. This should be dealt with diligently since access to and lack of methods and materials for advisory services is perceived as an important gap in the agricultural advisory service systems (cf. evaluation of CIP).

Finally the scale of the programme is ambitious. The countrywide implementation of the programme will be very challenging. The main problem will not be the availability of enough financial resources, but the availability of enough human resources for the countrywide implementation. To pre-empt the limitations in staff the programme has reserved a sizeable amount for recruitment by MINAGRI of additional staff for the duration of the programme. Furthermore close linkages with other project will have to be thought, such as the EU programme for building the capacity of the district administration, the SNV programme to assist in the strengthening of the JADF, CIP and IFDC Catalyst, PAPSTA and other programs that intervene in agricultural advisory services. The JADF are an important asset for seeking these synergies with other development initiatives at district level.

## 3.7.2 Fiduciary risks

The first element of fiduciary risk that funds are not used for the intended purpose is low. Considering the decision by the Directorate General for Development Cooperation (DGCD) to implement the programme under a co-management arrangement most of this risk is eliminated.

Furthermore, the programme will have a structure in which there is a steering committee that has to endorse workplans and budgets. Technical committees (the seed and AAS task forces formed under activity 5.2) have the mandate to propose adaptations of the programme. These task forces will be fully engaged in the execution of the programme and thus have direct interest in the use of the resources for the intended purpose.

The second type of fiduciary risk, that funds are not properly recorded and accounted for is higher, but acceptable. The public system in Rwanda is strict on financial procedures and the financial management system is relatively well organized. The fact that the program is co-management and that there is an AT contract and finance allows for the Belgian party to control this risk. The main risk is related to the use of the district administration for the disbursement of funds for agricultural advisory services does. In the first place the proper recording and accounting, but maybe more importantly, the speed and effectiveness of disbursement of funds.

To mitigate this problem it is essential to collaborate closely with ongoing initiatives to strengthen the district administration capacity and to assist the district in tendering and financial management. The government of Rwanda is putting much emphasis on transparent management of funds at district level, and will be assisted in building the capacity of the district administration through funding by the European Union.

The third type of fiduciary risk is that the programme does not achieve value-for-money objectives. This risk is real specifically in the field of contracting service providers. Currently there is a lack of skilled service providers, making the market for their services expensive. This can be aggravated by complicated procurement procedures, which are part of the public system in which this programme will be embedded. The procurement procedures for services are strict and based on open tendering. This does however disqualify a large number of potential service providers who do not have the capacity to compete in such procedures. To mitigate this problem the programme will have to be keen on piloting different methods of contracting services at district level to find a cost effective method of awarding service contracts (see activity 3.4). This specifically concerns the voucher system that is being suggested for enhancing the involvement of producer organizations in the delivery of agricultural advisory services while avoiding undermining existing cost-sharing mechanisms. It is therefore recommended to start with pilot initiatives and to take stock of existing experiences with similar voucher systems (i.e. CIP and projects in the East and Central Africa region).

## 3.7.3 Sustainability risks

#### 3.7.3.1 General implementation risks

The main risk for sustainable impact beyond the project life is to rely too much on the resources available during the project for fast result, without making a lasting impact on the systems for agricultural advisory services and seed supply. To assure a lasting impact the private sector involvement in the seed system is essential. For the advisory service system it is important to invest, as is proposed, in improving the system at different levels. First of all through the development of the capacity in MINAGRI including CICA to train and support service providers. It should continuously provide them with up-to-date knowledge, training methods and materials. Secondly through the building of an effective system to assess advisory service needs and respond to these needs through contracting service providers.

#### 3.7.3.2 Seed component: results 1 and 2

The main sustainability risk for the seed system is the habit of development initiatives to give seeds away for free. Although this does create a demand for seeds the moment these initiatives are there, the demand is suddenly disrupted the moment the development initiative ends. As such it is not based on a true demand at farmer level, based on the laws of economics, but on an artificial institutional market. For investors in seed enterprises this is difficult to cope with. It is essential that development initiatives that want to invest tin improving the availability of quality seed go through local suppliers and use local commercial distribution networks to avoid disrupting the business of emerging seed entrepreneurs.

## 3.7.3.3 Agricultural advisory services component: results 3 and 4

The major sustainability risk for agricultural advisory services is that (i) farmers do not pay directly for the services they use (services are considered public goods that are for free) and (ii) there is not yet a service market (with fees that reflect the quality of supply and the financing capacity of demand) but only a donor market (donors define the service fees).

Mitigation measures to be taken: (i) give users through their representatives in the District platforms the possibility to influence the allocation of funds to services; (ii) use existing cost-sharing mechanisms that have been developed by service providers and have national and local authorities define ceilings for service fees and promote cost-sharing mechanisms under support projects to the public sector.

# 3.7.3.4 Main actors intervening in the implementation

The main actors intervening in the implementation are listed in the following table.

Table 6: Main actors intervening in the implementation

	Summary of roles in the programme				
SPAT II program 2	Supervise the Advisory service component, plus the programme as a whole				
SPAT II program 1	Supervise the seed system component				
RAB national office	Implement the seed system component				
	Appoint the required staff				
	Recruit additional staff where needed				
	Coordinate implementation of the seed and advisory service components				
RAB zonal office	Implement the seed system component for priority crops of that zone				
	Produce foundation seed				
	Initiate zonal AAS teams				
	Appoint seed chain managers				
	Train service providers (seed and advisory service component)				
	Support the district staff in facilitating meetings of the District Agricultural Platforms				
	Assist the district staff in implementation of the programme activities Implement the participatory research activities related to variety selection				
RAEDB	Participate in the programme where fruit crops are concerned				
CICA	Considered as an integral part of RAB national office				
	Design and implement training programs, including training materials				
	Support the zonal AAS teams in implementation and training				
RADA seed unit	To develop into a separate Rwanda Seed Enterprise (RSE) and a seed certification service				
	Remaining expertise under RAB national and zonal offices to train seed producers and do seed related research				
CC-AFSR	To develop into a Rwanda Seed Growers Association				
RSE (Rwanda Seed Enterprise)	Produce basic seed at cost recovery basis or for profit				
RSGA (Rwanda Seed Growers Association)	Represent the interests of its members, professional seed growers				
District Agricultural	Implement needs assessments for agricultural advisory services with				

Platforms	assistance from district and zonal AAS office
	Select agricultural advisory service providers to answer demands
	Provide district administration with feedback on its policies and programs, through the JADF
	Communicate needs for capacity building of service providers to zonal AAS teams
JADF (Joint Action Development Forum)	Discuss coordinated action requests from the District Agricultural Platform
	Communicate feedback by the district agricultural platform on agricultural policies and programs to district administration
District administration	Use feedback from District Agricultural Platforms for adapting district development plans
	Contract agricultural advisory service providers using programme funds
	Follow-up on implementation of service contracts
	Participate in the development of a service quality assessment and documentation tool
Zonal Agricultural	Training of service providers
Advisory Service	Assist District Agricultural Platforms in needs assessments
teams	Provide input for the development of training materials and methods by CICA
NAASCO	Represent the district agricultural platforms at national level
	Provide feedback to the national policy makers on the effect of policies
	and programs on agricultural advisory services
	Review and amend the national agricultural extension strategy

# 4 Resources

## 4.1 Financial resources

# 4.1.1 Contribution of the Belgian Cooperation

The Belgian contribution will support the MINAGRI investment plan. The detailed budget is found in the budget tables below.

Table 7: Contribution of the Belgium Cooperation

				Mode	_		
В	UDO	<u>GE</u>	T TOTAL	d'exéc.	TOTAL	%	
Objectif spécifique: Improved access to advisory services for crop and livestock and							
A			access to and use of high quality planting materials, for men and women		15.285.280 6.008.600	85%	
			SPAT II : SP 1.5.1 Seed production chains of specific groups of food crop with a market value		0.000.000	33%	
lΔ	01		are professionalized		4.022.600	22%	
A		Ω1	Prepare tailor made strategies and action plans for marketable crops with	CO	283.000	2%	
A			Participatory variety selection for major marketable crops with market value	CO	480.000	3%	
A			Improving efficiency of foundation seed production	CO	355.000	2%	
Ā		04	Production of foundation seeds (zonal RAB revolving Fund)	CO	280.000	2%	
A	+	05	Building the capacity of certified and local seed multipliers	CO	515.000	3%	
Α	01	06	Season long field training seed multipliers (potatoes miltipliers and seed	СО	496.000	3%	
A	1 1	07	Basic seed for starting seed multipliers	СО	400.000	2%	
A	01	• •	Subsidies equipement and infrastructure for privale seed multipliers (seed	СО	400.000	2%	
A		09	Installation of seed gardens (other than potato and cereals)	СО	180.000	1%	
A	<u> </u>	•	Development and adaptation of quality control systems apppropriate for	СО	480.000	3%	
A	01	10	Zonal seed quality control officers (provision for 4 officers)	СО	153.600	1%	
A	02	1 1	Increased private sector involvement in the seed sector		1.986.000	11%	
A	1	01	Int. Technical Assistant: Seed Business (48 months)	REG	624.000	3%	
A			Seed chain managers (provision for 8 managers)	СО	384.000	2%	
Α	02	03	Provision for computer kits (quality control officer and seed managers	CO	24.000	0%	
Α	02	04	Transform basic seed production RADA seed unit into a Rwanda Seed	CO	377.000	2%	
			Support the professionalization of private multipliers and the development of	CO		2%	
Α	02	05	a seed handling, packaging and marketing enterprise		290.000		
Α	02	06	Match making between private seed producers and entrepreneurs and credit	CO	60.000	0%	
Α	02	07	Support the establishment of a private tissue culture laboratory	CO	70.000	0%	
Α	02	80	Support the start-up of the Rwanda Agro-Biodiversity Center	CO	157.000	1%	
			SPAT II : S.P. 2.1 - 2.2 - 2.3		8.685.680	48%	
			Sustainable mechanisms for demand articulation and responsiveness of				
A	03		market-orientated advisory services		3.793.600	21%	
Α	03	01	National technical Assistance for agricultural advisory services for Rab HQ	CO	465.600	3%	
Α	03	02	Equipment for computer kits	СО	40.000	0%	
			Set up District Agricultural Platforms, zonal advisory teams and a National	CO		2%	
Α			Agricultural Advisory Service Committe		350.000		
Α	03	04	Regular demand-articulation and needs assessment for advisory services	CO	284.000	2%	
Α	03	05	Stakeholder meetings	CO	248.000	1%	
Α			Inventory and registration of proximity agricultural advisory service providers	CO	100.000	1%	
Α			Contract agricultural service providers	CO	506.000	3%	
Α	03	80	Market-orientied advisory services for 4 years and 30 districts	CO	1.800.000	10%	

Proximity agricultural advisors capable of delivering responses to the			
demands of farmers, livestock breeders and their organizations		4.892.080	27%
A   04   01   AT Participatory Research and Extension	REG	624.000	3%
A 04 02 Strengthening CICA ahuman ressources	СО	412.080	2%
A   04   02   Strengthening CICA as a resource center for agricultural advisory services		461.000	3%
A 04 03 Training of proximity agricultural advisory service providers	СО	340.000	2%
A 04 04 Training of trainers FFS curricula (1st line)	CO	600.000	3%
A 04 05 Training of trainers FFS curricula (2nd line)	CO	360.000	2%
A 04 06 Other farmer training	CO	360.000	2%
A   04   08   Farmer field schools all districts 2350 FFS in 30 district	CO	1.645.000	9%
$_{\rm A}$ $_{\rm O4}$ $_{\rm O8}$ Monitoring of the use and effects of extension materials and training	CO	90.000	1%
SPAT II: S.P.4		591.000	3%
Lessons learned on agricultural advisory services and seed documented and used in policy and decision making	СО	591.000	3%
	СО		1%
7. 00 01		143.000	
A 05 02 Development and implementation of an M&E for learning framework	СО	106.000	1%
A 05 03 Experience based policy making	CO	244.000	1%
Contribute to the formulation and implementation of a national sector-wide	CO		1%
A 05 04 gender strategy and action plan		98.000	
X Réserve budgétaire (max 5% * total activités)		407.420	2%
X 01 Réserve budgétaire		407.420	
X 01 01 Réserve budgétaire COGESTION	CO	307.420	2%
X 01 02 Réserve budgétaire REGIE	REG	100.000	1%
Z Moyens généraux		2.307.300	13%
Z 01 Frais de personnel		1.594.800	9%
Z 01 01 International technical assistance	REG	1.248.000	7%
Z 01 02 National technical assistance to the Programme Manager 2	СО	172.800	1%
Z 01 03 BTC finacial and administrative support	REG	120.000	1%
Z   01   04   Autres frais de personnel : drivers	REG	54.000	0%
Z 02 Investissements		131.000	1%
Z   02   01   Véhicules	REG	75.000	0%
Z 02 02 Equipement bureau	REG	39.000	0%
Z 02 03 Equipement IT	REG	12.000	0%
Z   02   04   Aménagements du bureau	REG	5.000	0%
Z 03 Frais de fonctionnement		341.500	2%
Z 03 01 Services et frais de maintenance	REG	2.500	0%
Z 03 02 Frais de fonctionnement des véhicules (carburant, entretien et assurance et mainter	REG	115.500	1%
Z 03 03 Télécommunications	REG	12.000	0%
Z 03 04 Fournitures de bureau	REG	79.200	0%
Z 03 05 Missions ATI (per diem)	REG	79.800	0%
Z 03 06 Frais de représentation et de communication externe	REG	40.000	0%
Z 03 07 Frais financiers	REG	12.500	0%
Z 03 08 Frais TVA	REG	240,000	0%
Z 04 Audit et Suivi et Evaluation Z 04 01 Frais de suivi et évaluation (MTE & FE)	REG	240.000 60.000	1% 0%
Z   04   07   Frais de suivi et evaluation (WITE & FE)  Z   04   02   Evaluation of the implementation arrangement	REG	10.000	0%
Z 04 03 Audit	REG	60.000	0%
Z   04   05   Audit Z   04   Scienific and Technical support	REG	80.000	0%
Z 04 05 Backstopping	REG	30.000	0%
TOTAL	1,120	18.000.000	0 /
IVIAL		10.000.000	
	REGIE	2.670.000	15%
COGES	STION	15.330.000	85%

#### **REMARKS**

#### 1°) Contingency:

An amount for contingency of 407.420 Euros is necessary to compensate the exchange rate fluctuation, and unforeseen changes in the MINAGRI reorganization.

#### 2°) Early starting cost expenditures

Before the signature of the Specific Agreement, some starting cost may be spent for recruitment of the supporting staff and the investment (car, office equipment, IT equipment, office maintenance) as well as some administrative costs as shown in the following budget line, for a maximum of 428.000 Euros.

Z	01	02	National technical assistance to the Programme Manager 1	CO	172.800
			BTC finacial and administrative support	REG	120.000
Ζ	01	03	Autres frais de personnel : drivers	REG	54.000
Z	02	01	Véhicules	REG	75.000
Ζ	02	02	Equipement bureau	REG	38.000
Ζ	02	03	Equipement IT	REG	12.000
Ζ	02	04	Aménagements du bureau	REG	5.000

Plus a lump sum for the working/operational cost related for the above expenditure for a budget of 10.000 Euros (stationeries, tender publication cost, bank charge for opening an account, local transportation)

## 3°) Programme duration:

The period duration is five years, including a starting and an ending period.

# 4.1.2 Impact of the Belgium contribution to the agriculture investment plan

The Programme will partially participate to reduce the financial gap of the agriculture sector investment plan, which is shown in the following tables.

Table 8: Planned expenditure, by Government and Development Partners, and total costs for Program 1 sub programme Supply and use of agricultural inputs

	Total Cost	Source	Available Funds In US \$			Total	Investment Gap	Gap (%)
			2009/10	2010/11	2011/12			
SP1.5: Supply and	215,690,211	GoR	37,291,514	40,341,919	51,105,962	128,739,395		
use of agricultural inputs		DPs	15,759,086	14,068,605	11,050,565	40,878,256		
		Total	53,050,600	54,410,524	62,156,527	169,617,651	46,072,560	21.36%

Source: Agriculture investment plan (DP: Development Partners)

Investment Gap (GoR & DPs): US\$ 46,072,560

Table 9: Planned expenditure, by Government and Development Partners, and total costs for Program 2: producer organisation and extension, support to the professionalisation of producer

	Total Cost		Available Funds In US \$			Total	Investment G	iap
		Source	2009/10	2010/11	2011/12	Total		Gap (%)
P2: Support to the Professionalisation	41,960,157	GoR	3,259,531	2,667,498	1,902,654	6,306,240		
of Producers		DPs	9,549,273	9,187,001	1,634,454	20,370,728		
		Total	12,808,804	11,854,499	3,537,108	26,676,968	15,283,189	36.4%
SP2.1: Promotion	12,600,000	GoR	108,587	365,805	501,062	975,454		
of farmers' organisations and		DPs	5,334,758	5,166,586	152,572	10,653,916		
capacity-building for producers		Total	5,443,345	5,532,391	653,634	11,629,370	970,630	0.0%
SP2.2:	15,900,000	GoR	258,113	301,693	0	559,806		
Restructuring proximity services		DPs	1,152,027	1,293,532	0	2,445,559		
for producers		Total	1,410,140	1,595,225	0	3,005,365	12,894,635	81.1%
SP2.3: Research	13,460,157	GoR	2,892,831	2,000,000	1,401,592	6,294,423		
for transforming agriculture		DPs	2,962,488	2,626,874	108,669	1,698,032		
-g		Total	5,855,319	4,626,874	1,510,261	7,992,455	5,467,702	40.6%

Source: Agriculture investment plan (DP: Development Partners)

The investment Gap (GoR & DPs) is estimated at US\$ 14,683,189

Government will continue to provide extension services to smallholder farmers. However, it will also work with producers and extension agents to develop and promote a system through which farmers contract their own advisors but are able to utilize an appropriate mechanism, such as vouchers supplied by the government, to pay most of the cost of the service. The aim of the system is for farmers' groups to be able to choose their own advisors, and to change them if they are not satisfied with the assistance provided. Gradually, therefore, the private sector will be mobilized to contribute to the provision of extension services.

Under sub-program 2.2 the shortfall of approximately 80% makes it unlikely that Rwanda's extension system can be transformed into one that is responsive to farmers' needs and eventually one that would become increasingly privatized. While the results of this are difficult to quantify, it means that the extension service will not have the necessary flexibility, nor will it be privatized. Both of these will result in follow-on costs that result from continued government extension service provision as well as lost development opportunities, particularly in the area of market-based production.

#### 4.1.3 Contribution of the Rwanda Government

AT the time of the formulation, RAB budget was not available, but part of the MINAGRI recurrent budget will contribute to the programme, more specifically the budget of the SPAT II Programme 1 and 2, as well the recurrent budget of the Rwanda

The contribution of the Rwanda Government will be the following:

## Minagri/RAB/CICA infrastructure and facilities:

- Programme office at national and zonal level
- Utilities: water, electricity and internet connection

#### Civil servant:

- The MINAGRI staff at all level, central and zonal office
- The agronomist and livestock specialist from the district and sector

#### Operational cost:

- Cost sharing if needed for the transport and travel expenses for MINAGRI civil servant,
- Main Office furniture

#### **Concerning CICA:**

CICA is now established with the MINAGRI carrying the ambition of making it The information resource centre for agriculture in Rwanda. However its management, staffing and resources are still strongly embedded in the PASNVA project. During the last the 11th PASNVA Steering Committee, participants acknowledged the need to reinforce integration of CICA into the MINAGRI structure, to provide solid basis for continued enrichment and use of the centre beyond the PASNVA lifespan. The MINAGRI will then absorb the current operational costs and salaries of the CICA staff after termination of PASNVA as per following estimate:

Table 10: The budget to be covered by MINAGRI

Description	Library	GIS	ICT	Print Mat	Aud/Vi	Total RWF	Total €
Mission	-	-	5 650 080	2 603 040	-	8 253 120	11 463
Salaries	13 976 340	8 056 080	15 680 400	7 578 156	6 608 472	51 899 448	72 083
Running costs	1 780 344	240 000	1 715 604	1 620 000	240 000	5 595 948	7 772
Cica cross cutting						23 575 872	32 744
Total	15 756 684	8 296 080	23 046 084	11 801 196	6 848 472	89 324 388	124 062
Total €	21 884	11 522	32 008	16 391	9 512	124 062	620.310

The budget to be covered by MINAGRI for 5 years is estimated at around 620.000 Euros

## 4.1.4 Gender sensitive budgeting

The programme will give the opportunity to integrate a gender sensitive approach at budget level. This approach aligns with the Rwanda gender responsive budget initiative financed through UNIFEM by the Belgian Cooperation. MINAGRI is one of the four ministries working together with MINECOFIN on this matter.

The gender budget guidelines (MINECOFIN, May 2009) states that "The National Budget is considered as a policy statement in which it reflects the social and economic priorities of a government. Budget formulation is in general a restricted process, leaving out the majority of the citizens, especially women, who are disproportionately represented among the poor." Gender responsive budget (GRB) analysis is considered as a way to hold the Rwanda government accountable for its commitments to gender equality, by linking these commitments to the distribution, use and generation of public resources.

## 4.2 Human resources

## 4.2.1 Principles

In terms of the human resources required for the programme a number of principles will be adhered to. In the first place the programme will be fully integrated into the restructured MINAGRI. It will be implemented through the normal structures and procedures of MINAGRI as much as possible, to such an extend that for the majority of the MINAGRI staff working on the programme activities there is no distinction between the work that falls under the programme and the work that falls under the recurrent budget of MINAGRI.

MINAGRI staff will be fully available for the implementation of the programme activities. As such the programme is not a separate project implemented by a selection of MINAGRI staff, but a fully integrated programme, entirely owned and managed by MINAGRI, using to the maximum its existing staff.

The PRST II four programme managers are financed PAPSTA (IFAD)

It has to be recognized however that MINAGRI is currently understaffed, especially, but not exclusively, in the field of agricultural advisory service expertise and seed chain development and management. To facilitate and support the implementation of the programme specific additional human resources will be made available to MINAGRI in 3 different forms:

- 1. Additional staff recruited by MINAGRI using programme budget
- 2. Long-term international technical assistance
- 3. Punctual regular but non-permanent technical assistance

#### 4.2.1.1 Additional staff recruited by MINAGRI using programme funds

The programme made a reservation of budget for the recruitment **by MINAGRI** of a number of staff at both national and zonal level to provide it with the additional manpower deemed as necessary for the effective implementation of the programme.

The exact number of staff will be assessed at the beginning of the programme implementation, taking into account the gap in the human resources in the RAB at national and zonal level.

These staff will be paid through programme budget for a period of four years. The salary scale will be the one applied by MINAGRI/SWAP and MINAGRI/RAB. The alignment and harmonization principle will be applied and agreed at the steering committee.

The recruitment will be undertaken by MINAGRI as MINAGRI will, **after 4 years**, of the programme absorb these staff on their recurring budget, as far as they have shown to be performing and their position is still deemed required.

The most important criteria for the identification of these positions to be funded by the

programme is that they are essential for the building and functioning of the seed and advisory service systems, that they are foreseen to be needed beyond the project lifetime, and that the Rwanda government is confident they can be employed by the national system by the end of the programme.

The recruitment of the SPAT II Programme manager is financed by the PAPSTA programme. The Belgian contribution will finance three staff members of the programme II management staff for a period of 48 months (Financial manager specialist, Monitoring and evaluation specialist and a procurement specialist).

Table 11: Proposed additional staff to be recruited by MINAGRI using the programme resources.

Function	Number	Location	Job description					
PSTA programme II management support staff								
M&E officer	1	Central, SPAT II, program 2	Support the M&E of program 2					
		program 2	Assure alignment of the programme with the SPAT II M&E structure					
Procurement officer	1	Central, SPAT II,	Support the procurement within program 2					
		program 2	Assist the programme in procurement					
Financial management	1	Central, SPAT II,	Support the program 2 financial					
officer		program 2	management					
			Assist in the financial management of the					
			programme					
Total	3	Central, SPAT II,						
		program 2						

Table 12: Technical support at national and zonal level (to be confirmed at the beginning of implementation)

Function	Number	Location	Job description				
RAB							
Result 1 and 2							
General manager Rwanda seed enterprise	1	Central, responding directly to the PS or minister	Manage the transition of the basic production in RADA to an independent enterprise				
Seed chain managers	8	Zonal offices	Participate in development of crop specific seed strategies Coordinate implementation of crop specific seed strategies Manage seed chains of priority crops;				

Seed quality control officers	4	Zonal RAB offices	Assure collaboration and interaction between seed chain actors; Coordinate training on seed production Coordinate improvement of quality control system of zonal priority crops  Provide certification and quality control services for certified and quality declared seed systems Provide training to producers on certified seed production regulation Participate in training development, priority setting and changing the status of the certification unit.
Result 3, 4 and 5			1
Director of CICA	1	Central, SPAT II, programme 2 for CICA	Coordinate and manage the CICA
Audio-visual Specialist	1	Central, SPAT II, programme 2 for CICA	Production of audio-visual tools and material in support of the programme
Advisory Service Manager	1	Central, SPAT II, programme 2	Coordinate the implementation of the advisory service activities at zonal and district level
Advisory service coordinators	2	Central, SPAT II, programme 2	Assist the manager in coordination Coordinate training of Trainers FFS Assure M&E implementation Support the zonal AAS teams
Advisory service Facilitators	TO BE DEFINED AND CONFIRMED	Zonal offices; 3 East, North and South, 4 West (2 locations)	Facilitate district platforms Coordinate FFS implementation Facilitate zonal AAS platforms Implement needs assessments with district platforms Connect research, extension and seed.

## 4.2.1.2 Technical assistance

Technical assistance will provide for those areas where there is a clear temporary need for additional expertise. Technical assistance should not substitute MINAGRI staff, but be an added value to improve the quality of implementation of the programme. This quality improvement must be mainly achieved through on-the-job support to MINAGRI staff, both regular and recruited through the programme.

Permanent technical assistants will be anchored at programme management level, under programme 2 of the PSTA-II, but they will work on a day-to-day basis within the RAB. Four permanent international technical assistants are proposed as part of the programme. Detailed Terms of Reference for the 4 permanent Technical Assistants can be found in Annex 7.4

Table 13: Proposed permanent technical assistance

Function	Duration	Location	Job description
Result 1 and 2			
TA seed business	48 months	Central, PSTA programme 2 and RAB	Support professionalization of the seed sector Strengthening of the private seed sector
Result 3 and 4			
TA training and communication (Delco)	60 months	Central, SPAT II, programme 2 and RAB	Support CICA in development of relevant and effective extension materials, methods and curricula
			Support the training program of service providers, including FFS
			Support to the zonal AAS teams
TA in participatory	48 months	Central, SPAT II, programme 2 and RAB	Support the zonal AAS teams
research and extension			Facilitate research – extension linkages
			Support needs assessments
			Support FFS programs and other capacity building campaigns
			Support development refresher courses
TA Financial Controller and Advisor	36 months	Central PSTA and RAB	Handling the financial, accounting and administration issues
Supportive staff			
BTC Local Admin and Finance Officer	60 months	Central SPAT programme 2	Accounting and financial monthly report following the BTC format
Administrative Assistant	60 month	Central SPAT programme 2	
Drivers	48 months	Central SPAT programme 2	

In addition budget reservations are made for punctual technical assistance on specific topics. This technical assistance will be solicited both nationally and internationally through consultancy contracts. Rather than requesting for one-off ad-hoc consultancies the programme will seek punctual technical assistance on precise subjects for the duration of the programme, not permanently, but through short missions at regular intervals.

Table 14: Proposed additional technical assistance (to be confirmed during implementation)

Торіс	Duration Estimate	Job description
Potato aeroponics and conventional rapid multiplication	1 month / year for 4 years	Support the Ruhengeri ISAR staff and a private entrepreneur with the fine-tuning of rapid multiplication of potato through aeroponics as well as conventional rapid multiplication.
Decentralized certified and Quality Declared seed production	1 month / year for 4 years	Support the establishment of a class of decentralized seed multipliers for priority crops with an effective quality control system
Development of FFS curricula	2 times 1 month / year for 4 years	Specific expertise for the development of FFS curricula and the first training of trainers
Coaching Rwanda Agro- Biodiversity Center	1 month / year for 4 years	Support the start-up of operations, specifically the establishment of first collections  Establish regional collaboration  Elaborate an operational and strategic plan  Search for appropriate long term donor support
Client Oriented Agricultural extension	1 month / year, for 4 years	Support the establishment and embedding of the district platforms  Provide tools for needs and opportunity assessment  Support the development of a system or contracting advisory services at district level
Coaching of the gender focal point in Minagri	1 month / year, for 4 years	Capacity building Development of gender sensitive methodologies Contribution for gender strategy and gender action plan at Minagri
M&E for learning	1 month per year, 4 years	Design the M&E for learning system Support the documentation of programme lessons Support the reflection on and readjustment of programme activities Facilitate evidence based policy review

# 4.3 Training and capacity building resources

A budget of 1,8 millions Euros has been computed for the districts (30) for 5 years to finance market oriented agricultural advisory services under the request of the district agricultural platform and the non objection of the district and the programme management (Activities 3.4.)

A provision of nearly 1,65 million euros has been computed also for more than 2000 Farmer Field School (activities 4.3) to be implemented during 5 years.

Other services that has been budgeted for are the following:

- Development of curricula
- Farmer training sessions,
- · Training of trainers for Farmers field school,
- Farmers field school,
- Training of trainers,
- · Training of districts accountants,
- Local and regional workshops,
- Training material (printing material, audiovisual supports),
- · Participatory assessment activities,
- Participatory research,
- Exchange field visits,
- Stakeholder meetings,
- · Regional network meeting,
- · Local, national and international consultative meetings,
- Consultancies national and international,
- Studies,
- Etc.

## 4.4 Material resources

## 4.4.1 Transport investments

Each activity has been budgeted with a lump sum amount of money for transport related costs, which are

- · Minibus, Car and motorbike hire (national system)
- Per diem (national standard)
- · Purchase of motorbike if needed

One car will be purchased for the Rwanda Seed Enterprise manager and three cars will be purchased for the ITA: one for the DELCO, one for the seed component and one for the advisory service component.

## 4.4.2 Technical equipments

The following equipment and material is budgeted for :

- Subsidised storage infrastructure: Cold store for mini-tuber, seed stores
- Subsidised essential small technical equipment and material: for the publicprivate enterprise
- Subsidised equipment for seeds grower associations
- Consumable for the seed laboratory
- Equipment for the regional public agro-bioversity center
- Foundation seeds
- Consumable for rapid multiplication for tissue culture
- · Training material and audiovisual support

## 4.4.3 Office equipment

Office equipment might be necessary for a national and zonal level for the staff recruited under the programme budget contribution, this include computer kit, small office furniture.

# 4.5 Operational resources

The operational cost are budgeted in the general means, which cover the following

- Maintenance and operational cost for the cars, at least for the ITA.
- Office stationeries,
- Travel costs for the ITA and staff recruited in direct management
- Communication cost
- Financial costs

Other operational resources will be detailed in the annual agreement with the RAB and the Districts, in line with the MOU between the MINAGRI and the RAB based on a precise annual planning. Those operational costs are included in the cost per activities.

This will include the following:

- Stationeries
- Office running cost
- Operational cost for motorbike (fuel, maintenance, insurance)
- Travel costs

# 5 Implementation modalities

## 5.1 Legal framework and administrative responsibilities

The project will be administered according to the principles of partnership and joint implementation and embedded in the framework of local implementation of the Strategic Plan for Agriculture Transformation (SPAT II) and the Agriculture Investment Plan 2009-2012.

The project will be implemented through two modalities:

- **co-management**; for budget line corresponding to the activities, the national technical staff to support the RAB and the support staff of the project management 2 (Financial Manager specialist, procurement specialist and Monitoring and evaluation specialist)
- direct management by BTC for budget lines corresponding to the recruitment of project support staff (LAF, Administrative assistant, drivers), international expertise, backstopping and evaluation mission, scientific support and audits

## 5.1.1 The Legal framework

The Specific Agreement (SA) will determine the legal framework of the programme Administrative, Financial and Technical responsibilities

#### 5.1.2 Administrative coordination

Institutions that bear responsibility for the administrative coordination of the project are:

- Ministry of Agriculture, and Animal Resources (MINAGRI): Authorizing Officer
- Belgian Development Agency (BTC): co-Authorizing Officer
- MINECOFIN (CEPEX).

The MINAGRI has the responsibility to supervise the financial aspects of the Specific Agreement (SA) on behalf of the Rwandan Party. It will authorize the financial flow to the programme. The MINAGRI trough the SWAP Facilitator and the Programme Manager has the responsibility to supervise the technical arrangements of the SA on behalf of the Rwandan Party.

The DGD has the responsibility to monitor policy issues and respect for the SA on behalf of the Belgian Party. The DGD shall exercise this role through the Attaché for International Cooperation at the Belgian Embassy in Kigali.

As agency charged by the Belgian Party to perform its commitments in the facilitation of formulation, implementation and follow-up of the programme, BTC will be responsible for monitoring all expenditures made under the Belgian budget and provide technical

backstopping to the implementation of the programme in the field. BTC shall exercise this role through its Resident Representative in Kigali, as co-authorizing officer of the programme.

# 5.2 Technical responsibilities

The technical responsibility is shared between the Rwandan and Belgian parties.

All decisions related to the technical implementation (planning, reporting, monitoring the quality of the activities, decisions about the opportunity of activities and expenses, communication, etc.) are taken in mutual agreement.

The procedures and responsibilities are further detailed in the following chapters.

#### Role of the Ministry of Economic Planning and Finance

It is the role of the Ministry of Economic Planning and Finance to oversee the planning, both financial and in program terms, of the Ministry of Agriculture and Animal Resources, including the work funded by its development partners.

The Ministry of Economic Planning and Finance, also has primary responsibility for managing the relationships between the Government of Rwanda and its development partners, through its External Finance Unit. This includes the recently introduced Division of Labour, where development partners have been asked to focus their assistance on three sectors.

#### Role of the Ministry of Agriculture and Animal Resources

MINAGRI is responsible for the day-to-day oversight of the SWAp and the implementation of the sector's strategic plan. It will hold regular meetings with donors and other stakeholders in the sector, including the monthly Agriculture Sector Working Group meeting.

Regarding donor coordination, the overall task of MINAGRI is to lead, chair and support all joint consultative mechanisms in the agriculture sector and to ensure that all support is aligned to government plans, budgets and procedures. The key department is the Planning and Program Coordination Secretariat.

MINAGRI will have overall responsibility for the implementation of the programme at national level. The SWAP Facilitator and Programme Managers, who on behalf of MINAGRI coordinate all development interventions, will carry overall responsibility for the coordination and supervision of the programme implementation in the country.

# 5.3 Implementation and follow-up structures

#### 5.3.1 Structure of MINAGRI

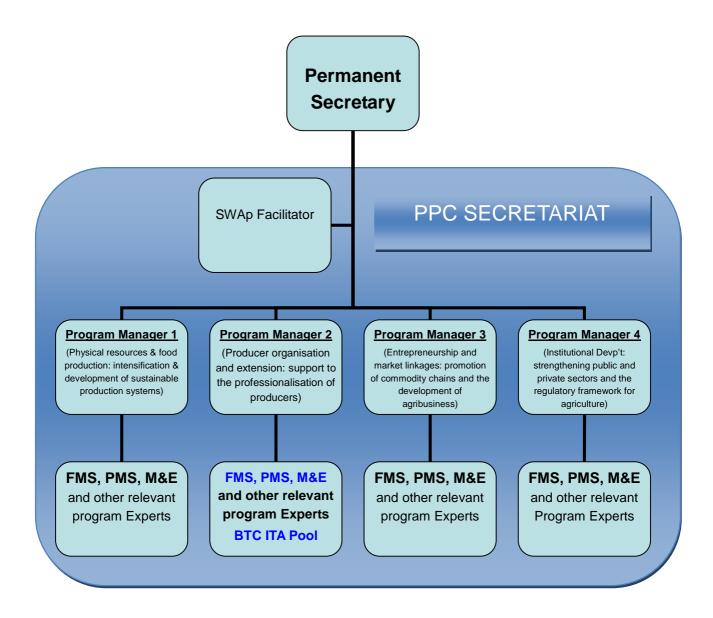
For the effective implementation of the programme the different structures proposed under the new set-up of MINAGRI are used (see Figure 4).

As indicated in figure 6 below, The PPC Secretariat falls under the office of the PS. Under the secretariat fall 4 Program Managers that will manage the four PSTA II programs. Each Program Manager will have a supportive team that includes a Financial Management Specialist, Procurement management Specialist and the Monitoring and Evaluation Specialist, as shown in the following Figure:

Ministerand Minister of State Permanent Secretary Strategic Plagning & Internal Resource Program Coordination Rwanda Agricultur Rw and a Export Management & Development Boar Development Board Finance Unit Secreta iat SWAp Coordinator Program 4 Staff Program 3 Staff Program 2 Staff Program 1 Staff

Figure 4: Structure of MINAGRI

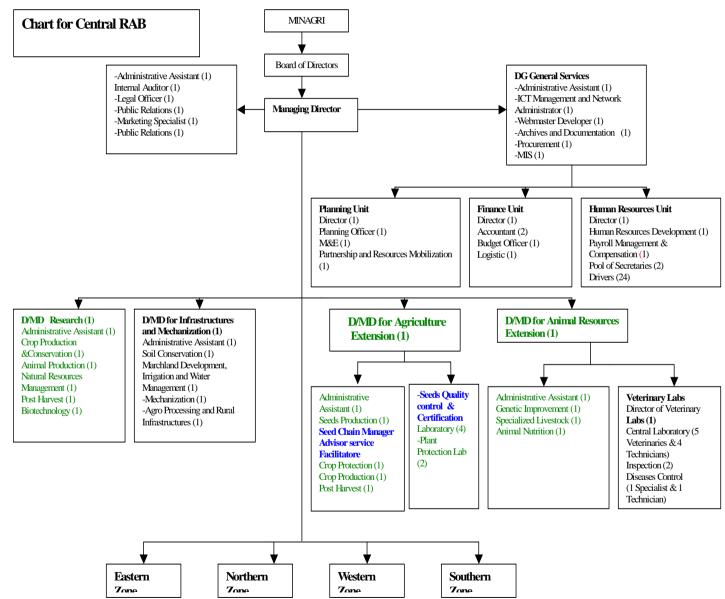
Figure 5: SPAT II Structure



## 5.3.2 Structure of Rwanda Agricultural Board

The structure of the foreseen organization chart is presented in the figure bellow, a bigger picture is presented in the annex.

Figure 6: RAB national level structure



## **5.3.3** Programme implementation structures

#### 5.3.3.1 The programme management team at MINAGRI level.

MINAGRI will have overall responsibility for the implementation of the programme at national level. The programme will be embedded in programme 1 for the seed component and in programme 2 for the advisory service component. But the programme coordination of the Belgian program (both the seed component and the advisory services component) will be assured by the SPAT II programme manager 2 and the DELCO /ITA in charge of communication and extension, provided by BTC.

Four International Technical Assistant will support the programme. One of them will be the DELCO<sup>10</sup> and will co-manage the programme with the SPAT II Programme manager 2.

An International Technical Assistant for contract and finance will support the DELCO. The terms of reference are presented in Annex N7.5.

Under the overall responsibility of the BTC Resident Representative, the TA "Delco" is responsible for the Belgian team for the overall coordination and planning.

As the DELCO will be assisted with this AT Contracting and Finance, he/she will also have time to be a technical assistant in the field of communication and Extension and will have a functional relation with the RAB implementation structure.

The TA/DELCO in Training and communication and TA Contract and Finance are involved in the management of the program (see paragraph 5.4.5 below) but will also provide technical support and advice depending of the needs of MINAGRI or RAB.

Two other technical assistants will support the programme under the coordination authority of the DELCO: One specialist in seed business and one in participatory research and extension. They will provide advice and assistance to the RAB at national and zonal level, and to the districts to implement the annual action plan defined within the Memorandum of Understanding (MOU) signed between the SPAT II program and the RAB / districts (see paragraph 5.4.2 bellow). The terms of reference are presented in Annex N7. Therefore and under the authority of the DELCO, the ITA will have a strong functional relation with the RAB, the implementation body of MINAGRI. They will spend the majority of their time as technical advisor without management duties.

The following figure presents the anchorage of the International Technical Assistant within the MINAGRI structure.

As the programme will be implemented through three RAB directorates, a Programme Contracting Manager will be designated by the RAB Manager General for the sake to facilitate the coordination within the RAB structure.

As the MINAGRI is in a process to establish the RAB and the SPAT II Programme manager, the implementation arrangement will be revised by the steering committee after one year.

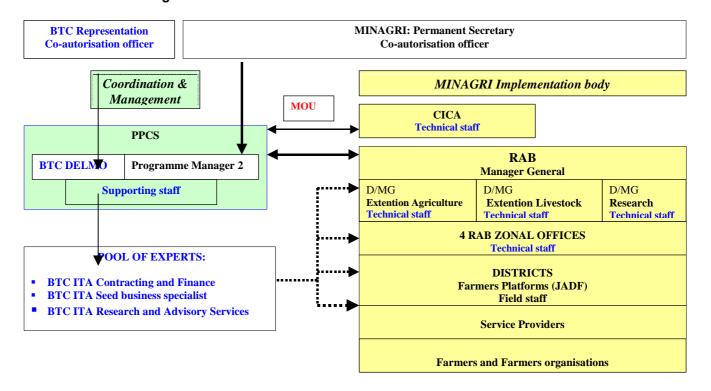
The financial responsibility and money flow structure are explained in the coming

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<sup>&</sup>lt;sup>10</sup> Co-management delegate

paragraph.

Figure 7: Programme implementing arrangement and technical assistance anchorage



### 5.3.3.2 CICA at national level

CICA is now established with the MINAGRI carrying the ambition of making it the information resource centre for agriculture in Rwanda. However its management, staffing and resources are still strongly embedded in the PASNVA project. The programme will strengthen CICA with a director, as well as an audio-visual national expert.

#### 5.3.3.3 RAB at national level

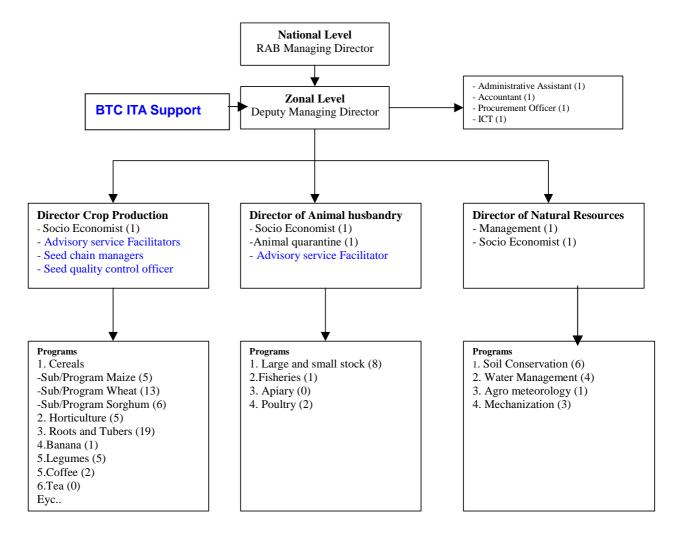
At the RAB national level and under an arrangement with the SPAT II Programme Manager, the RAB General Manager, together with the **RAB** Deputy Managing Director and their team are responsible of the execution and coordination of the programme activities at the national level.

The RAB managing director might, if needed, designated or appointed a **Program Contract Manager** (PCM) to assure the daily management and coordination of the part of the Belgian program that will be implemented by the RAB. Furthermore, the RAB will be reinforced by additional human resources, being **one Advisory Service Manager and two Advisory service coordinators**. The activities implementation will be decentralized at the zonal level.

#### 5.3.3.4 RAB at zonal level

At Zonal level, the zonal office teams will assist on matters of preparation, implementation and monitoring of the programme. The zonal office teams will count with a number of additional advisory service facilitators, seed chain managers and zonal quality control officer. The exact number of this technical staff will be decided, when RAB zonal structure will be operational, depending on the gap between the available staff and what will be needed. A provision for additional staff have been budgeted

Figure 8: Organisation chart of the foreseen RAB zonal office



#### 5.3.3.5 At District level

District Councils and JADF: In accordance with national policy, the District will be encouraged to outsource specific services to public and private service providers through corresponding contracts: Cooperative organisations, NGO, private service providers and other entities.

## 5.3.4 Organization of the Agricultural Advisory service system

Execution of the programme activities will be through the Rwanda Agricultural Board (RAB), its zonal offices and the district offices. The RAB at central level will be reinforced with an advisory service manager, assisted by 2 coordinators. Under the authority of the RAB Manager General, they will be coordinating the programme activities in the field of agricultural advisory services. The programme activities will be implemented at 2 levels, at the level of the zonal RAB offices and through the district offices. This organization will have to be revised when the RAB structure will be operational.

**The zonal offices** will directly engage in training new and existing proximity advisory service providers. To facilitate their interventions, multi-disciplinary Agricultural Advisory Service teams (AAS teams) will be created at the zonal RAB office, under the authority of the Zonal Office director.

In addition to providing training to proximity service providers, the zonal RAB office will play a supporting role to the district administration. Eight seed chain managers will be placed in each of the zonal RAB offices. This person will bear the responsibility for facilitating the interaction and coordination between the different private and public actors in the seed system of those crops for which the zonal office has the specific mandate. For this the person will interact directly as well as through service providers with formal and informal seed growers and their representing bodies.

**In the district**, the district agricultural platforms will be initiated or reinforced, which will be formed as a sub-committee of the Joint Action Development Forum. The district agricultural platforms will provide the linkage to the agricultural producers for the assessment of needs and opportunities, with the support of the zonal RAB offices. The formal responsibility for the implementation of activities at district level remains with the district administration.

The district agricultural platforms have at the same time a direct linkage to the national agricultural extension committee, which is foreseen in the National Agricultural Extension Strategy, and will be the coordination body representing the district agricultural platforms. The NAES interacts directly with the national RAB office as well as with programme 2 of the SWAP.

**Proximity advisory service providers** will interact with farmers and seed growers. They have a direct linkage to the district agricultural platform, which can select them to provide services. The district administration would formally contract them.

At the bottom, the agricultural producers interact with the programme through the help of the district agricultural platforms. For the effective interaction with the platform the composition of the platform must be well designed, in terms of representation of women and producers from lower wealth classes.

Figure bellow presents the organizational chart Agricultural Advisory Service system:

Organizational Chart Agricultural Advisory Service System **SWAP Program 1 SWAP Program 2** RAB National NAASCO: Nat. Agr. **Advisory services Manager Advisory Service Com.** Advisory service coordinators **Zonal RAB offices Seed chain managers** District administration 4 **JADF: Joint Action Development Forum DAP: District Agricultural Proximity Advisory Platform Service Providers** Seed Growers **Agricultural Producers** 

Figure 9: Organizational Chart : Agricultural Advisory Service System

## 5.3.5 Organisation of the Seed system

The organization of the seed system is presented in figure 5. The main responsibility for seed system improvement lies in programme 1, but a supporting role is also expected through programme 2.

Foundation seed production is done at the level of the zonal RAB offices. Seed chain managers based at the zonal RAB offices will bear the responsibility to facilitate interaction and coordinate activities of the different actors in the seed chain. This is needed to assure that the different public and private actors collaborate smoothly to assure and effective seed production. Some of the foundation seed, specifically of the vegetatively multiplied crops, can be produced by the privately run tissue culture facilities, which will be promoted as a part of this programme.

The private tissue culture laboratory will at the same time produce basic seed of the same crops. At the same time basic seed will be produced by the Rwanda seed

enterprise. The Rwanda seed enterprise will be initiated through the transformation of the basic seed production component of the RADA seed unit under this programme.

Well performing multipliers can engage in commercial basic seed production of those crops for which there is a good market. At the same time private seed growers are responsible for the production of certified seed.

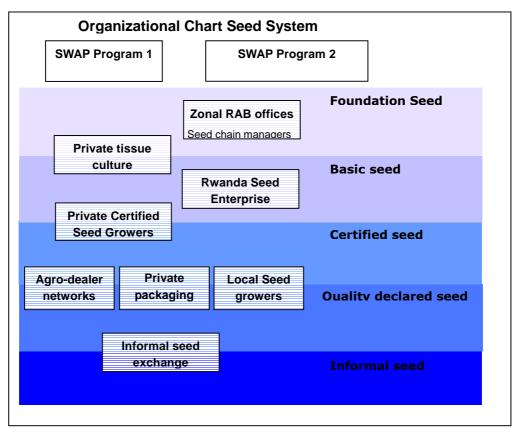
Also newly emerging local seed growers, such as farmer cooperatives and farmer field school groups, or individuals, will engage in seed multiplication under this programme. Initially they will produce quality declared seed, with quality control system initiated by this programme, and run by producers. Those local multipliers seeing opportunities for getting into certified seed production will be supported in doing so.

Certified seed will be packaged by private entrepreneurs who may be directly linked to certified seed growers or their association, be independent or be linked to agro-dealers.

Well-packaged certified seeds are marketed through a network of agro-dealers that will be build under the second phase of the Crop Intensification Programme.

Quality declared and certified seed is used in the informal seed sector for further multiplication, sale and farmer-to-farmer exchange.

Figure 10: presents the organization of the seed system as follows:



## 5.3.6 Steering Committee (SC)

The Project Steering Committee is the main control, supervision and guidance structure to ensure proper orientation and follow-up. The SC is the programme "steering committee"

In order to perform its duties the SC will meet at least twice a year. Extra ordinary meetings can be called on demand of one of the SC members. All decisions are taken in consensus and all ordinary members of the SC sign the minutes, made-up by the secretariat.

The SC consists of the following members:

- PS MINAGRI
- Resident Representative BTC
- MINECOFIN
- MINAFFET

The MIGEPROF and Managing Director RAB will be invited as non-voting members.

Its core duties are to:

- Supervise on the approval of the TFF.
- Supervise on the execution of contributions of both parties.
- Appraise progress of the programme and the achievement of its Specific Objective
- · Approve annual work plans and budgets
- Approve any necessary changes in the intermediated results, respecting the Specific Objective and the total budget of the project.
- Formulate recommendations on necessary modifications in programme design.
- Approve final Programme Report and closure of the programme.
- Agree on transfer of property at the end of the programme.

The Programme Manager 2 and the DELCO will assume the steering committee secretariat.

The Steering Committee can invite, if needed, other representatives of organizations, institutions or individuals.

## 5.3.7 Programme Task forces

Monitoring the functioning of the system of the quality seed production and use of the advisory services for agricultural producers is strategic and necessary. Therefore two programme taskforces, one for the Agricultural Advisory Services (AAS) and one for the

Seed sector will be organized at the national level (and zonal level) by MINAGRI and related SPAT II Programme managers.

The task forces will meet every six months and more at the beginning of the programme.

The Task Forces consist of the following members:

- The Programme Manager 1 & 2 of the SPAT II
- · Representative of RAB national level and zonal level
- Representative of ISAR
- BTC Technical Assistants
- · Representatives of farmer organizations
- Representative of key Private sector operators.
- Any other actors of the programme

Its core duties are to:

- Draw lessons learned from the implementation of the programme, document on programme experiences
- Implement a M&E learning framework and process
- Design a system of measuring change as a result of the programme
- Appraise progress of the programme, the task forces will look back at the experiences of the last interval meeting, assess lessons, and plan for the next interval.
- Based on the past experience, identify specific amendments of activities and indicators defined in the programme logframe. Indicators being a mixture of qualitative and quantitative indicators
- Formulate recommendations to the programme management and SC on project design.

# 5.4 Implementation modalities

## 5.4.1 Principles

The principles that guide the implementation of the programme are:

- 1. Alignment to national strategy, work plans and budgets
- 2. Integration in national structures
- More alignment to national systems. In many areas the management will be aligned to the national procedures and tools. For some aspects BTC procedures and tools have to be used.
- 4. Co-management. The programme will be co-managed by MINAGRI/RAB and BTC.

5. Implementation agreements. Implementation agreements will be signed with RAB, the Zonal RAB offices and the Districts.

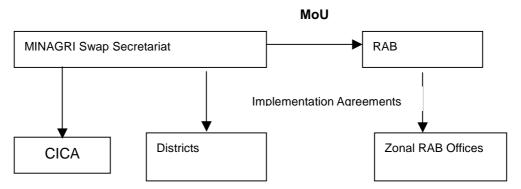
The funds will be co-managed by MINAGRI/RAB and BTC except for the budget lines "regie" that will be managed directly by BTC (technical assistance, audit, evaluation, backstopping,....).

The implementation modalities will be more detailed in a programme implementation manual (PIM). The PIM will we elaborated at the beginning of the programme by the Programme 2 Staff of the Swap Secretariat and the Belgo-Rwandan programme staff. It may also be necessary to make minor changes to the modalities defined in the TFF to bring them more in line with the Swap Manual, which is not yet finalised and with the procedures of the RAB, which is not operational yet. The PIM has to be approved by the SC.

After one and a half year the implementation modalities will be evaluated to see whether the different processes run well.

## **5.4.2 Implementation Agreements**

In the framework of the PSTA II the MINAGRI (Swap Secretariat) signs MoU with the implementing bodies. For the Belgian programme this will also be done.



Implementation agreements will be signed at two levels:

#### 1) Between the MINAGRI and CICA

For the implementation of the Belgian programme implementation agreements will be signed each year with the CICA for the implementation of specific programme activities. The implementation agreements will define the results to be achieved, the activities, the budget, the applicable procedures and the reporting requirements. The activities defined in the implementation agreements will be co-managed by the MINAGRI and BTC. The implementation agreements will be prepared by the programme manager 2 of the MINAGRI and the AT Extension (Delco) and have to be signed by the Permanent Secretary and the BTC Resident Representative.

#### 2) Between the MINAGRI and RAB

For the implementation of the Belgian programme implementation agreements will be signed each year with the RAB for the implementation of specific programme activities. The implementation agreements will define the results to be achieved, the activities, the budget, the applicable procedures and the reporting requirements. The activities defined in the implementation agreements will be co-managed by the RAB and BTC. The implementation agreements will be prepared by the programme manager 2 of the MINAGRI and the AT Extension (Delco) and have to be signed by the Permanent Secretary and the BTC Resident Representative.

## 3°) Between the RAB and Zonal RAB Offices

The Zonal RAB Offices will implement some of the activities of the programme. The central RAB office and BTC will jointly oversee the implementation. Annually an implementation agreement will be signed with each Zonal RAB office for the activities related to the Belgian programme. The implementation agreements will define the results to be achieved, the activities, the budget, the applicable procedures and the reporting requirements. The implementation agreements have to be validated by the programme manager 2 of MINAGRI and AT Extension (Delco) and will be signed by the PS MINAGRI, MD RAB, DG Zonal RAB Office and BTC Resident Representative.

Implementation agreements can also be signed with the district for the activities related to external advisory services. These implementation agreements will be also be prepared by the programme manager 2 and AT Extension (Delco).

#### 5.4.3 Planning Modalities

The programme planning and reporting system has to be embedded in the MINAGRI and CEPEX reporting system as well as BTC procedures.

The planning process for the Belgian programme will be integrated in the planning cycle of the MINAGRI. Annually a work plan and a budget have to be elaborated by the different units. Each quarter the planning has to be updated. The planning process is piloted by the Swap Secretariat of the MINAGRI. The Swap Secretariat also assures the consolidation of the planning of the different units. For the Belgian programme a separate planning report has to be made. The planning of the Belgian programme will be done jointly be the staff of MINAGRI/RAB and the Belgo-Rwandan programme staff.

The programme annual working plans will be compiled from stakeholders planning (SWAP, RAB, District). The SPAT II Programme Manager will be responsible for the coordination of the planning between all partners and will compile the programme working plan for due presentation to the SC.

The annual planning for the Belgian programme has to be presented to and approved by the SC. The quarterly planning for the Belgian programme has to be validated by the programme manager 2 of the Swap Secretariat and the AT Extension (Delco) and has to be communicated to the BTC office in Rwanda.

Monitoring and evaluation will be given specific attention under project result 5.

#### 5.4.4 Procurement Modalities

The national procurement procedures have to be respected. The procurement process will be organised according to the internal procedures of the MINAGRI/RAB. The joint responsibility is implemented via a non-objection/co-signing of BTC at different process steps.

Yearly a procurement plan for the Belgian programme has to be made according to the instructions of MINECOFIN. The annual plan has to be approved by the SC together with the work plan and the budget. The annual plan has to be updated quarterly. These quarterly plans have to be communicated to the BTC office in Rwanda. The procurement plans will be elaborated by the procurement officers of the different institutions with assistance of AT Contract and Finance and has to be validated by AT extension (delco) the Programme manager 2. The AT Contract and Finance and the Procurement Officer of the Swap secretariat will assure the consolidation.

The procurement officers of the different institutions with the necessary input of the technical experts of these institutions and the BTC experts will elaborate the DAO. The procurement officer of the Swap secretariat and the AT Contract and Finance will assist the procurement officers of the different levels where needed.

Before publication the DAO has to be approved by AT Contract and Finance and Programme Contract Manager (only for part implemented by RAB) if the estimated value is greater than 5.000 EUR. Is the estimated value is greater than 25.000 EUR a non-objection of the BTC Resident Representative is required.

The procurement officers of the different institutions will publish the tenders. The opening and analysis of the offers will be organised according the national procedures and the procedures of the organisations. BTC has to participate in the analysis of the offers if the value is greater than 5.000 EUR.

The attribution proposal has to be approved by MINAGRI/RAB according to their normal internal procedures. For the activities at the RAB it is also required that the RAB Managing Director validates the attribution proposal. BTC has to give its non-objection. For amounts less than 25.000 EUR the non-objection will be given by the AT Contract and Finance and for amounts greater than 25.000 EUR the BTC Resident Representative will co-sign with the PS of MINAGRI. For tenders done at decentralised level a non-objection is only required above 5.000 EUR and this for practical reasons.

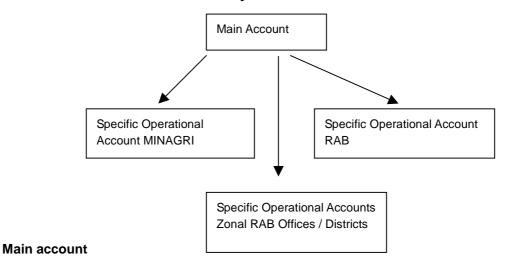
## **5.4.5 Financial Management Modalities**

The funds have to be managed according to the following principles:

- Efficiency
- Economy

- Transparency
- · Respect of the legal framework
- The expenditures have to be useful and opportune and should be in line with the approved budgets and work plans.

## 5.4.5.1 Account Structure and Payments



As soon as the agreement between Rwanda and Belgium is signed a main account in EUR has to be opened at the National Bank of Rwanda. The account name will be 'Belgian Contribution - SPAT-II'.

The bank signatories are:

- Authorising officer:Permanent Secretary MINAGRI
- Co-Authorising officer: Resident Representative or Manager Administration & Finance of BTC Office Rwanda

This account will be used to:

- Receive the funds from BTC headquarters
- Transfer funds to the operational accounts at the MINAGRI, the RAB, Zonal RAB offices and Districts

## **MINAGRI** operational account

A specific account at MINAGRI level has to be opened for expenses related to the Belgian intervention. The bank signatories are:

- MINAGRI: PS or Financial Management Specialist Programme 2
- BTC: TA Contract and Finance

Before payment the invoices have to approved by Programme Manager 2 and TA Extension (Delco)

This account will be used to:

- pay the salaries of Programme 2 Staff
- pay expenses related to activities directly implemented by the MINAGRI

#### **RAB Operational account**

A specific account at the RAB level has to be opened for expenses related to the Belgian intervention. The bank signatories are:

- RAB: MD, DAF
- BTC : AT Contract and Finance (Resident Representative if amount greater than 25.000 EUR)

Before payment the invoices have to validate by RAB Managing Director

After the implementation of Integrated Financial Management System (IFMS) for the Belgian programme the two signatories will come from the RAB (MD, DAF). BTC will provide a non-objection for the payments.

This account will be used to:

- pay expenses related to the activities directly implemented by the central RAB office
- pay salaries of RAB staff financed by the Belgian programme

#### **Zonal RAB Office accounts / District Accounts**

For each Zonal RAB Office and district a specific account has to be opened for expenses related to the Belgian intervention. BTC will not sign on these accounts but for expenses more than five thousand (> 5.000 EUR) a non-objection has to be obtained from the AT Contract and Finance. The signatories on the Zonal RAB Office Accounts have to be in line with the mandate structure of the RAB.

These accounts will be used to: pay expenses related to the activities implemented by the Zonal RAB office (activities defined in implementation agreements)

#### Regie account

For the local expenses under the management of BTC a specific project account will be opened.

#### 5.4.5.2 Budget

The total budget amount of the programme may not be exceeded. If a budget increase is necessary, a request must be introduced by the Rwandan party to the Belgian State after having received the approval of the steering committee (SC).

The budget of the programme defines the budget limits, within which the project must be

carried out. Each change of in the budget must be approved by the SC on the basis of a proposal worked out by FMS of Programme 2 and TA Contract and Finance and validated by the programme manager 2 and TA Extension (Delco). The BTC procedures have to be respected.

The budget of the Belgian programme has to be integrated in the budget of Rwanda.

Annual budget: See planning in annexes

Budget execution reports: See financial reporting (§ 5.5.11)

### **5.4.5.3 Funding**

#### **BTC Headquarters to Main Account**

As soon as the main account is opened a first cash request can be done to the BTC office in Rwanda. The requested amount should correspond to the financial needs of the first three months. The request has to be done according to the BTC procedures. For the following disbursements, the project must introduce a cash request to the BTC office in Rwanda at the beginning of the month before the next quarter. The request has to be done according to the BTC procedures.

The cash requests will be prepared by the AT Contract and Finance and FMS of Programme 2 and must be validated by the Programme Manager 2 and AT Extension (Delco). The amount of the cash request is equal to the estimated cash needs for the coming quarter plus a cash buffer of maximum 50.000 EUR. The transfer of funds by BTC is done at the beginning of the quarter.

The transfer will only be done if the reporting requirements have been respected.

#### Main Account to Operational Accounts at MINAGRI

The transfer of funds is done according to the cash needs. The cash request is prepared by FMS of Programme 2 and validated by Programme Manager 2 and AT extension (Delco).

#### Main Account to Operational Accounts at RAB

The transfer of funds is done on a quarterly base according to the procedures defined in the implementation agreement between MINAGRI and RAB. The cash request is prepared by AT Contract and Finance and validated by Programme Manager 2 and AT extension (Delco).

## Main Account to Zonal RAB Office /Districts

The transfer of funds is done according to the procedure defined in the implementation agreement with the Zonal RAB Offices. The cash request is prepared by the Zonal RAB office and is send to the Central RAB Office. The cash requests have to be validated by AT Contract and Finance and Programme Contract Manager. The transfer may only be done if the Zonal RAB Offices have respected the reporting requirements.

## 5.4.5.4 Financial Reporting

#### 5.4.5.4.1 Accounting

#### Accounting of main account and operational account at MINAGRI

The BTC accounting tool has to be used. Based on the information in this accounting tool the monthly reports to the MINECOFIN can easily be made. The transactions may also be registered in the tool of MINAGRI. The number of transactions on these accounts is limited. Each month the accounting (electronic file and reports) has to be sent to the BTC office in Rwanda after validation by the FMS of Programme 2 and AT Contract and Finance. The supporting documents will remain at the MINAGRI where they have to be available for on site control.

#### **Operational account at RAB**

The BTC accounting tool has to be used at the start of the project. MINECOFIN is currently testing a new financial tool (IFMS) that can also be used for the management of external funds. This tool can be used on the condition that it is fully operational at the RAB and on the condition it is adequate to manage external funds. An evaluation will be done before switching to this tool. Each month the accounting (electronic file en reports) has to be sent to the BTC office in Rwanda after validation and consolidation by the FMS of Programme 2 and AT Contract and Finance. The supporting documents will remain at the RAB where they must be available for on site control. Monthly a report also has to be sent to MINECOFIN.

#### **Operational account at Zonal RAB Offices**

The accounting tool and procedures of the Zonal RAB offices may be used. Each month the Zonal RAB offices have to transfer there accounting to the central RAB office. The accounting has to be approved by the AT Contract and Finance and the DAF of RAB. The accounting requirements will be more detailed in the implementation agreements that will be signed with the Zonal RAB Offices.

#### 5.4.5.4.2 Budget follow-up

Each quarter a budget execution report has to be made by each unit (RWF and EUR). The reporting templates and timing will be aligned to the procedures of MINAGRI, RAB and MINECOFIN. For the Belgian programme the reports will be consolidated by the FMS of Programme 2 and AT Contract and Finance and validated by Programme Manager 2 and the AT Extension (Delco).

#### 5.4.5.4.3 Financial Planning

Each quarter a financial planning has to be made by each unit (RWF and EUR). The reporting templates and timing will be aligned to the procedures of MINAGRI, RAB and MINECOFIN. For the Belgian programme the FMS of Programme 2 and AT Contract and Finance will consolidate the reports. The consolidated financial planning has to be presented to the Programme Managers of the Swap Secretariat together with the budget execution report. Il also has to be sent to the BTC office in Rwanda. The consolidated financial planning (without details) also has to be registered in the BTC tool.

## 5.4.6 Human Resources Management Modalities

National Staff Swap Secretariat Programme 2 (M&E officer, Procurement Officer and Financial Management Officer)

The staff will be recruited according to the procedures of Rwanda and will be contracted by MINAGRI. The management of the staff is the responsibility of MINAGRI. The Belgian programme only intervenes in the financing of their salaries during the programme duration. The salaries have to be fixed according to the applicable salary schemes of Rwanda. The salaries will be paid from the operational account at the MINAGRI.

#### National Support Staff

The definition of the staff needs to assure a timely and effective implementation of the Programme 2, the Belgian programme will be done jointly by MINAGRI, RAB and BTC with respect of the budgetary framework. In the TFF a proposal has been made. Changes to this proposal have to be approved by the SC.

The staffs, financed by the Belgian programme, have to be recruited according to the procedures of Rwanda and be contracted by MINAGRI/CICA/RAB. BTC has to give its non-objection for the ToR before publication of the job offers and before the final selection of the candidate. The salaries have to be fixed according to the applicable salary schemes of Rwanda. The salaries will be paid from the operational account at MINAGRI or RAB. The staff has to be integrated in the existing structures of Rwanda. The management of the staff (contract, training, evaluation) is the responsibility of the Rwandan institutions. There will be no hierarchic relation between the national support staff and the BTC staff.

#### International Technical Assistance

The staff will be recruited according to the procedures of BTC and will be contracted by BTC. The ToR are defined in the TTF. For each function BTC will present a candidate to the MINAGRI. The MINAGRI has to give its non-objection. The management of the ITA is the responsibility of BTC.

#### **BTC Support Staff**

The staff recruited by BTC will be a Local Admin and Finance officer for the BTC financial accounting and financial procedures, an administrative assistant and three drivers. They will work under the authority of the DELCO.

The staff will be recruited according to the procedures of BTC and will be contracted by BTC.

## 5.4.7 Reporting

The Programme manager 2 and TA Extension Delco are responsible for consolidating the reporting. Every quarter progress has to be reported to the PS and the BTC office in

Rwanda. The reporting will be aligned to the reporting system that will be elaborated by the Swap secretariat.

The RAB Managing Director is responsible for the annual public agreement (MOU) between the Programme and the RAB.

Every six months progress also has to be reported to the steering committee (SC). This report shall relate the assessment of achieved activities in comparison to established plan for the concerned period, the planning of programmed activities for the following period, problems of execution and financial report.

An annual report has to be sent to the BTC office in Rwanda, based on the procedures of BTC.

## 5.4.8 Monitoring and Evaluation

#### 5.4.8.1 Base-line database

Baseline data will be established during the initial phase of the programme with contributions from the district agricultural staff and district development plans. This database will be drawn from the information collected during the initial activity 5.1 which will include a gender specific baseline.

These assessments will provide a database on a representative sample of farmers and on district, sector and village-level extension workers and the indicators to be monitored in accordance with the indicators of the logical framework.

RAB socio-economic specialists will compose and monitor the baseline in the context of their mandate with support and supervision from the Programme Manager 4 and its M&E unit.

Monitoring and evaluation will be given specific attention under project result 5.

#### 5.4.8.2 Monitoring

The monitoring of activities will be done at three levels:

- District level: under responsibility of the District Agronomist
- Zonal level: to be compiled by the RAB General Manager assisted with the Advisory facilitator and seed chain manager
- National level: the M&S unit from the SPAT II Programme Manager, following the MINAGRI procedures.

The supervision and backstopping to monitoring of activities will be a responsibility of the programme manager 2.

Monitoring activities will be crucial during the start of the programme as the RAB structure, organisation and management as to become operational.

### 5.4.8.3 Backstopping

The project will receive two kinds of external support and backstopping during the intervention:

## • International Scientific Support

Periodic technical backstopping by International consultants or an international institution will be provided on demand for specific aspects of the project

## BTC backstopping

Provision is made for periodical backstopping from BTC headquarters upon demand from the BTC Representation in Kigali.

### 5.4.8.4 Programme review after one year

A programme review will be jointly realized (MINAGRI/BTC) after one year, when the new MINAGRI structure will be operational (RAB, CICA), this give the opportunity to fine-tuning the programme organizational structure and the budget. A budget has been computer for that purpose.

#### 5.4.8.5 Mid-term review

An external mid-term review (MTR) will be executed after programme's second year. The terms of reference for this mission will be prepared by the MINAGRI Strategic Planning and Programme Coordination Init (SPPC) and BTC and forwarded to SC for approval. The main objective of the mid-term review is to assess the progress of the programme's activities against planning (efficiency) and the extent the results and specific objective are going to be achieved during the course of the intervention (effectiveness). The review will also examine the financial, institutional and managerial setting of the intervention.

Its findings and recommendations will be presented to the SC. The mission's report will be used for a reorientation during the course of the programme if necessary.

#### 5.4.9 Audit

The project will be audited after the first complete fiscal year (if the Belgian programme starts in January 2011 than the first audit will be done in the third quarter of 2012), after the third complete fiscal year and at the end of the programme. The audit will include the following items:

- 1. Verification of the existence and the respect of procedures;
- 2. Verification, whether the accounts reflect reality.
- Verification of the efficient and economic use of funds and of the respect of the budget
- 4. Verification of the MOU implementation

The terms of references of the audit have to be approved by the PS and BTC Resident

Representative. BTC will select and contract an independent and certified audit firm. The auditor's reports will be forwarded to the SC as well as to the Auditor General. The report must be translated by the project (programme FMS + AT Contract and Finance) into an action plan. Each meeting of the SC progress has to be reported.

The audit can be done jointly (which is preferred) with the audit of the Auditor General or with audits of other donors. Audit reports of the Auditor General related to the Belgian funds also have to be transmitted to the steering committee (SC).

## 5.5 Modification of the TFF

The present TFF may be amended by mutual consent of the parties. The task forces established under activity 5.3 should propose modifications of the programme logframe, its activities and budget routinely. The task forces will suggest the changes to the programme management and steering committee.

It is essential to install an attitude of expecting and encouraging a practice of regular modifications based on the insights gained during the implementation. The task of the programme management and steering committee is to assess the quality of the argumentation for the suggested changes, and requesting for further explanation if this is inadequate.

Careful consideration must be given not to change the present TFF in a way that would unnecessarily change the outcome of the intervention as originally agreed between the parties. A formal agreement by the Belgian government is needed for the following:

- the duration of the Specific Agreement;
- modification of the total Belgian financial contribution;
- modification of the Specific Objectives of the intervention.

The request of the above modifications has to be approved and motivated by the Steering Committee (SC). The exchange of letters requesting these modifications shall be initiated by the Rwandan party and shall be addressed to the Belgian Embassy.

The following changes to the TFF will have to be approved by the Steering Committee (SC):

- the financial modalities<sup>11</sup>;
- the programme results and activities and their respective budgets;
- the respective budgets for central and provincial levels;
- the specific objective indicators and result indicators;
- the composition and responsibilities of the Steering Committee;
- the mechanism to change the TFF.

<sup>&</sup>lt;sup>11</sup> If the implementation modalities change, a formal agreement by the Belgian government is necessary.

## 5.6 Closure of the project

#### Financial Statement

Six months before the end of the project, a financial statement following the BTC procedures has to be drafted. BTC must check the financial statement before its presentation to the closing steering committee (SC).

Amounts managed with BTC responsibility and not used at the end of the project, and the balance of the financial contribution not send on project bank accounts will fall in cancellation at the end of the project. The balance of the project bank accounts in comanagement will be allocated by mutual agreement.

## • Expenses after the end of the Specific Agreement

After the end of the Specific Agreement, no expenditure will be authorized except if it is related to commitments entered into before the end of the Specific Agreement and mentioned in the statement of the steering committee (SC).

# 5.7 Overview of management processes

**Table 15: Overview of management processes** 

Coordination	Strategic coordination : Steering Committee (SC)			
	Overall programme coordination: <i>Programme Manager 2</i> and <i>AT Extension (Delco)</i>			
Daily management	, , , , , , , , , , , , , , , , , , ,			
Daily management and coordination	Programme contract manager at the RAB and AT Extension (Delco)			
Planning	Integration in the planning cycle of MINAGRI			
	Planning process is piloted by Swap Secretariat			
	Planning is validated by <i>Programme manager 2</i> and <i>AT extension</i> (delco)			
	Annual planning: to be approved by the Steering Committee SC			
Procurement	The national procurement procedures have to be respected. The procurement process will be organised according to the internal procedures of the MINAGRI/RAB. The joint responsibility is implemented via a non-objection of BTC at different process steps:			
	validation of procurement plans by AT Extension     (Delco)			
	2. non-objection on DAO (AT Contract and Finance and Resident Representative for amounts greater than 25.000 EUR)			
	non-objection before attribution / co-signing(AT Contract and Finance and Resident Representative for amounts greater than 25.000 EUR)			
	Validation is also required by <i>Programme Contract Manager</i>			
	The BTC staff will assist in the drafting of ToR and in the analysis of the offers			
Finance	Separate programme accounts:			
	Main account : PS - Resident Representative			
	Operational account MINAGRI: FMS Programme 2 - AT Contract and Finance			
	Operational account RAB : MD/DAF - AT Contract and Finance			
	Operational accounts Zonal RAB offices: double signatory RAB, non-objection BTC if amount is greater than 5.000 EUR			

Funding: BTC procedures + procedures defined in implementation agreements

## Financial Reporting:

- Accounting: BTC system except at decentralised level. Possibility to switch to IFMS of Rwanda. Validated by AT Contract and Finance and FMS of Programme 2
- 2. **Quarterly budget execution reports** aligned to procedures of partner institutions.
- 3. **Financial planning**: idem budget execution reports + consolidated financial planning in tool of BTC.

## 6 Cross cutting themes

### 6.1 Environment

The impact on the environment by the programme is expected to be neutral. In the training components of the programme environmental issues will be integrated. In the current IPM project, which will continue to a large extend under this programme, emphasis is given to the benign use of agro-chemicals, most specifically pesticides. To assure a rational and safe use of pesticides, both for the environment as well as for the health of the users and consumers, producers require knowledge that are currently often lacking. As a result of this lack of knowledge one expects overuse of pesticides, both overdosing and underdosing of pesticides, ineffective application, unsafe storage, unhealthy implementation and a non-respecting of safety periods for safe consumption. The first principle adhered to in all the training efforts will be the avoidance of the use of pesticides, and offering management alternatives. However, when pests and diseases would lead to substantial economic damage to the producer, and there are no alternative pest and disease management options, other than the use of chemicals, a minimal use strategy will be propagated.

Integrated soil fertility management, focused on a durable productivity, will be a second underlying principle of training efforts. For integrated soil management erosion control, management of soil organic matter, and the combination of organic and chemical sources of nutrients will be promoted. The use of chemical fertilizer will be promoted based on the maximum rate of return on investments, rather than on profit optimization or yield maximization. This leads to both lower fertilized recommendation as well as lower risks of loss of investment by agricultural producers.

## 6.2 Gender

In this programme gender is understood as not only covering male – female relations, and the consequences of these relations for the effects of the programme. Also the power relations and consequences of these relations between farmers in different wealth classes are considered as part of gender. The programme will try to improve the position of women and underprivileged groups through activities in the field of seed system improvement and agricultural advisory services. The programme will strive to improve the position of women and underprivileged groups.

Specifically the programme will do this through the following:

- 1. Assure an equal representation of women in the district agricultural platforms with a hard minimum of 30% women.
- 2. Have a representative of women organizations in he National Agricultural Extension Committee (NAECO)
- 3. Assure an equal representation of women in the capacity building efforts by the project, with a hard target of at least 40%

- 4. Actively participate in the development of a sector wide gender strategy and implement the outcomes within the framework of the programme
- 5. Gender and wealth class disaggregated data collection in the baseline study and the end of programme outcome assessment
- 6. Gender and wealth class disaggregated indicators to be defined as part of the Monitoring and Evaluation framework
- 7. Gender disaggregated data collection on programme beneficiaries
- 8. Align with the national gender strategy and action plan (specifically on the level of the indicators)
- 9. Support for the Gender focal point

Supporting the Gender focal point makes an important link with the existing gender machinery in Rwanda. Under the instruction of the Prime Minister's Office (Directive from the Prime Minister), gender focal points were established in several line ministries and institutions. Priority was given to persons involved in decision-making (Directors of Planning). Their main task on the operational level is to ensure the effective implementation of the National Gender Policy (NGP) in the different line Ministries.

Since the Gender strategy for Minagri and the Gender Action Plan are both documents that still has to be formulated the present programme will work closely together with the GFP with respect to the integration of a gender specific approach for the seed sector and extension (in the gender strategy and action plan). Actions that can be proposed are f.ex. Gender analysis of the seed sector (formal/informal,), market studies, capacity building for female members and heads of cooperatives,....

Two problems however hamper the effectiveness of this system:

- · high turnover of staff
- · lack of technical capacity

In order to strengthen the capacities and to support the GFP of the Minagri, support will be provided. Assistance can be given on the operational level and concerns:

- Support the monitoring of the implementation progress of the national gender policy within institutions and sub-sectors of Minagri.
- Support the assessment of the training and capacity needs of members of the central RAB.
- Support the inventorisation of capacity needs in gender mainstreaming approaches in the different instances of Minagri.
- Support the disaggregation by sex of all statistical and qualitative data.
- Support the formulation of gender responsive policies, programmes and budgets.

With respect to monitoring and evaluation activities it is also important to install from the beginning of the programme a close collaboration with the Gender Monitoring Office

(GMO) (established in 2007, Constitution, art. 183 as an independent public institution).

The GMO is monitoring the gender respect, gender equality and equity. Gender promotion in national development is also one of the responsibilities of the Office. The GMO can collaborate with the present programme regarding:

- The development of clear performance indicators in line with priority areas to ensure effective monitoring and evaluation of progress (in function of Logframe)
- The development of a comprehensive monitoring and evaluation system with gender specific indicators, both qualitative and quantitative, and an inbuilt review system (in line with base line study)
- The use of a number of tools and mechanisms for implementing, monitoring and evaluating activities;
- The conduct of periodic gender impact assessment studies

## 6.3 Social economy

The following table presents the main farmer's organisation in Rwanda

Table 16: List of the main farmer's organisations

Organization	Creation	Status	Districts	Value chain	N° of cooperative s or associations	N°of members
BAIR	1999	ASBL	Rubavu Rutsiro Ngororero Nyabihu	Banana, maize, fruits et vegetables, wheat, Livestock	20 pre- cooperatives et cooperatives	15.000
IMBARAGA	1992	Corporati on	25 of the 30 districts of the pays	Wheat, maize, cassava, Irish potatoes, bananas, fruits, livestock	230 associations & cooperatives	21.000
INGABO	1992	Corporati on	Muhanga Ruhango Nyanza Kamonyi	Maize, cassava, fruits	-	13.406
IMPUYAKI	1989	Coop.	Gicumbi	Wheat, Irish potatoes, Livestock	1	780

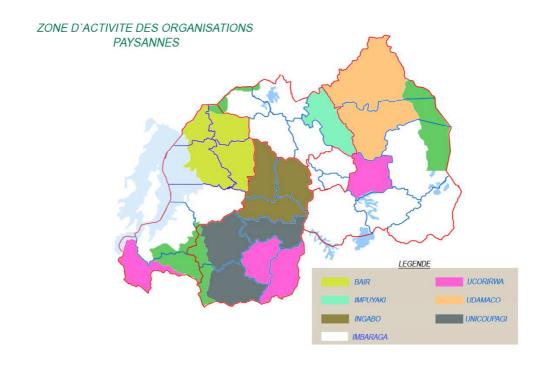
UNICOOPAGI	1991	Coop.	Nyaruguru Nyamagabe, Huye Nyanza	Wheat, maize, Irish potatoes	55 associations & 6 cooperatives	15.652
UCORIRWA	1999	Coop.	Rusizi, Nyamagabe, Gisagara, Muahanga, Ngoma, Kirehe, Bugesera, Gatsibo,Nyagatare, Rwamagana,Ruhango, Nyaruguru	RICE	55 cooperatives	62.000
UDAMACO	2005	Coop.	Nyafatare Gatsibo Kayonza	Livestock (Milk production)	14 cooperatives	4162

Source: ROPARWA, 2008

Five farmer's cooperative apex organisations are member of a national network, the ROPARWA, which is supposed to become a cooperative confederation. There are active in seven value chain: Cereals: Rice, Maize, wheat; Tuber: Irish Potatoes and sweet potatoes; Banana and fruit (pineapple and passion fruit); Livestock: Milk production

Those organisations do not reach yet their self-financing, they depend for their investment and operation cost from donors,

Figure 8: Distribution of member organisations of ROPARWA



## 7 Annexes

# 7.1 Logical framework

Goal			
Agricultural outputs and incomes increa	sed under sustainable production systems an	d for all groups of farmers, and food security ensured	d for all the population.
Specific objective	Performance Indicators	Means of verification	
Improved access to advisory services for crops and livestock and access to and use of high quality planting materials, for men and women	<ul> <li>Increased satisfaction by producers regarding access to relevant information and advisory services</li> <li>Use of quality seed by producers doubled compared to the baseline</li> <li>Reduction in the import of seed in comparison with import quantities in 2010.</li> </ul>	<ul> <li>Baseline survey and end of project outcome assessment</li> <li>National statistics</li> </ul>	
Results	Performance Indicators	Means of verification	Assumptions

Results	Performance Indicators	Means of verification	Assumptions
Seed production chains of specific groups of food crops with a market value are professionalized	<ul> <li>Increase in the production of quality seed of the 6 groups of crops</li> <li>x% of farm housing using improved seeds</li> </ul>	<ul> <li>Certified and quality declared seed production and sales figures Minagri</li> <li>Evolution from the base line survey</li> <li>Report of the Rwanda Seed Company</li> </ul>	Continued government support for the agricultural sector
2. Increased private sector involvement in the seed sector	<ul> <li>The market share of the private sector for the different groups of crops has increased</li> <li>x% for credits for seed production, with equitable access for women.</li> </ul>	Baseline survey and end of project outcome assessment	Entrepreneurs of the sector willing to invest for the long term
3. Sustainable mechanisms for demand articulation and responsiveness of market-oriented	<ul> <li>Up to date gender specific needs assessment for allocation of advisory services at district level</li> </ul>	<ul> <li>District agricultural platform reports</li> <li>Baseline survey and end of project outcome assessment</li> </ul>	<ul> <li>District agricultural platforms taking responsibility in execution</li> <li>District administration has the capacity to</li> </ul>

Results	Performance Indicators	Means of verification	Assumptions
advisory services	<ul> <li>Use of the district agricultural platforms as demand articulation mechanism for advisory services by the district administration, development projects and NGOs</li> <li>Increase of participation of women in agricultural platforms</li> </ul>		effectively channel programme funds to service providers  Joint Action development Forums functioning well
4. Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations	<ul> <li>Increase in the number of practicing private service providers</li> <li>Number of active farmer field schools, with increase of women with x%</li> <li>Number of trainers and of farmers trained for each of the priority crops, with increase of women with x%</li> <li>Equal representation of women in the capacity building efforts by the project, with a hard target of at least 40%</li> </ul>	<ul> <li>Inventory of proximity advisory service providers</li> <li>AMIS</li> <li>District and programme records on graduated Farmer field schools</li> <li>End of programme outcome assessment</li> <li>Desegregated Statistic on people trained</li> </ul>	Newly trained proximity service providers obtain contracts and do not stop operating
5. Lessons learned on agricultural advisory services and seed documented and used in policy and decision making	<ul> <li>Documented programme lessons referred to in policies, strategies and action plans</li> <li>A feasibility study addressing food security and economic empowerment of women</li> </ul>	<ul> <li>Published agricultural policies, strategies and action plans</li> <li>M&amp;E system of project</li> <li>Gender action plan for the project</li> </ul>	<ul> <li>New policies are adopted by decision makers</li> <li>Programme management allows itself time for reflection</li> <li>Implementation pressure does not lead to management for quick results rather than system building</li> <li>Gender strategy and gender specific plan for Minagri are available</li> </ul>

Main activities	Inputs / efforts
1.1 Prepare tailor made strategies and action plans for	Studies of the economics of certified and informal seed of different groups of crops
groups of crops with similar seed system opportunities	Stakeholder meetings to elaborate the seed strategy per group of crops, involving experts and practitioners
	Elaborate seed strategies

Main activities	Inputs / efforts
	Regular seed chain actor meetings to coordinate seed chain improvement
1.2 Participatory variety selection for major food crops with	Priority setting for the use of programme resources for participatory variety selection and promotion of new varieties
market value	■ Participatory variety trials
	Participatory taste and quality assessments
1.3 Improving efficiency of foundation seed production	Studies for cost rationalization and business plan development for foundation seed production by the zonal RAB offices
	■ Initiation of revolving funds for the production of foundation seed by zonal RAB offices
	■ Fine tuning of the rapid multiplication of potatoes (conventional and aeroponics)
	■ Initiate cold storage for potato mini-tubers in Musanze to optimize use of aeroponics
	Support private sector involvement in foundation seed production of vegetatively propagated crops (see activity 2.3)
1.4 Building the capacity of certified and local seed	Priority setting for capacity building of certified and local seed multipliers
multipliers	Develop curricula for training of seed multipliers of specific prioritized crops
	■ Training of trainers on seed multiplication
	Construction of seed stores with promising seed businesses
1.5 Development and adaptation of quality control systems	Training seed multipliers on requirements for certified production
appropriate for the different groups of crops	<ul> <li>Setting up quality control systems for Quality Declared Seed (QDS) with local seed businesses and producer organizations for prioritized crops</li> </ul>
	Assisting in making the certification system more independent and auto-financing
2.1 Transform the basic seed production of RADA seed unit	■ Prepare a business plan for the Rwanda Seed Enterprise
into a Rwanda Seed Enterprise	Study and adapt the legal framework for the Rwanda Seed Enterprise  Study and adapt the legal framework for the Rwanda Seed Enterprise
	■ Present the business plan for the Rwanda Seed Enterprise to the relevant decision makers
	■ Support the transition process from RADA seed unit to Rwanda Seed Enterprise
	■ Train RSE staff in seed business management
	■ Initiate contractual linkages between Rwanda Seed Enterprise and RAB foundation seed production
	■ Initiate contractual linkages between RSE and long term projects sourcing seeds
	■ Initiate where necessary contract farming arrangements with seed multipliers
2.2 Support the professionalization of private multipliers	■ Support the transition of the CC-AFSR into a Seed Growers Association
and the development of a seed handling, packaging and marketing enterprise	<ul> <li>Feasibility studies, business plan development and legal advise for initiation of seed handling, packaging and marketing enterprises</li> </ul>

Main activities	Inputs / efforts
	Technical support in the field seed handling, treatment, packaging and marketing
	<ul> <li>Support the linking of emerging seed handling, packaging and distribution enterprises to seed distribution projects such as the Crop Intensification Project and IFDC-CATALIST programme.</li> </ul>
	<ul> <li>Assist the emerging enterprises through match making with financial institutes, based on the developed business plans (see activity 2.3)</li> </ul>
	If required, limited co-investment in equipment needed for emerging enterprises
2.3 Match making between private seed producers and	Support seed businesses in elaboration and defence of credit proposals
credit providers	Lobby with financial institutions for the consideration of credit proposals
	Collaborate with credit providers in the development of tailored financial products for seed multiplication activities.
	<ul> <li>Support credit providers with data collection and relevant information required to assess the bankability of credit proposals.</li> </ul>
2.4 Support the establishment of a private tissue culture	Support business plan development for private tissue culture facilities
laboratory	Guarantee a long term contract for tissue culture materials, thus assuring a market for the start-up enterprise
	Co-invest in starter infrastructure for potato aeroponics and experiment with the technology
	Assure professional and cost effective inspection services of materials under multiplication
	Provide technical support and training for the tissue culture laboratory staff
	Support exchange visits to other private tissue culture laboratories in the region
	<ul> <li>Assure that publicly run tissue culture laboratories produce materials at a cost-recovery basis, including costs of staff, rather than in a subsidized manner.</li> </ul>
	Provide a tax-holiday for profits from the tissue culture enterprise
2.5 Support the start-up of the Rwanda Agro-Biodiversity Center	<ul> <li>Initiating collection, characterization, documentation and storage of plant genetic resources of maize, beans and indigenous vegetables, and taking an active role in promoting the use of these genetic resources in participatory varietal selection and dissemination</li> </ul>
	Promote the active use of plant genetic resources through (re-)introduction
	<ul> <li>Provide technical advice, to coach the inexperienced R-ABC staff in their first experiences in collection and operating the gene-bank</li> </ul>
	Support the elaboration of an agrobiodiversity programme in the form of a multi-year operational plan
	Build connections with other genetic resource conservation units in the region
	Support the access of resources through the Diversity Trust and other funding mechanisms adapted to biodiversity

Main activities	Inputs / efforts
	conservation on the basis of the operational plan
3.1 Set up District Agricultural Platforms, Zonal Agricultural	Review of the mandate of District Agricultural Platforms and elaboration of clear Terms of Reference.
Advisory Service Teams and a National Agricultural	Restructuring of the existing 11 platforms.
Advisory Service Committee	Initiation of platforms in the remaining 19 districts.
	<ul> <li>Assure embedding and recognition of the District Agricultural Platforms by the district administration and develop links with ongoing similar initiatives.</li> </ul>
	Training of platform facilitators (district agronomists).
	Convene quarterly and special meetings of the district platforms.
	Set-up of the zonal Agricultural Advisory Service teams (zonal AAS teams).
	Set-up of the National Agricultural Advisory Service Committee (NAASCO).
	Define the calendar of key events in an annual cycle of planning, monitoring and assessing agricultural advisory services.
3.2 Regular demand-articulation and needs assessment for	Design needs assessment methodology.
advisory services	Training AAS teams and District agricultural Platforms on needs assessment methodology.
	Fieldwork related to the needs assessment.
	<ul> <li>Aggregate data and information on needs coming from the grassroots level.</li> </ul>
	Differentiate needs according to the priority commodity sub-sectors and the different categories of farm households.
	• Analyze the needs in the light of market-orientation, value-chain development in the priority commodity sub-sectors, the district development plan and the national agricultural policy.
	<ul> <li>Assess whether needs can be met by existing service providers, or whether a larger effort to build service provision capacity is required.</li> </ul>
3.3 Inventory and registration of proximity agricultural	Prepare pragmatic criteria for service provider registration in the database.
advisory service providers	Making the inventory of service providers per District and Zone.
	<ul> <li>Initiate a satisfaction rating system for advisory service providers.</li> </ul>
	Review and improve the categorization system of service providers in AMIS.
	<ul> <li>Publish the information on service providers in the yellow and white pages of AMIS.</li> </ul>
3.4 Contract agricultural advisory service providers	Development of a transparent and effective procedure for granting service provision contracts.
	■ Preparing the terms of reference for the provision of services based on the choices made under activity 3.2.
	<ul> <li>Selection of service providers while relying on the Zonal directories prepared under 3.3.</li> </ul>

Main activities	Inputs / efforts
	Coordinate the provision of services
<b>4.1</b> Strengthening CICA as a resource centre for agricultural advisory services	• Consult local partners (MINAGRI, RAB, District Agricultural Platforms, established agricultural advisory service providers and producer organizations) on the role of CICA and the needs for support.
	<ul> <li>Elaborate a plan for developing CICA as a resource centre including the architecture for future technical and methodological reference material.</li> </ul>
	Prepare training materials based on needs assessments and for direct use in training of trainers activities.
	Prepare complete Farmer Field School training curricula for priority problems of selected crops.
	Update training and extension materials.
<b>4.2</b> Training of proximity agricultural advisory service providers	• Define a calendar for the key moments and periods for assessing training needs, training of agricultural advisory service providers and coaching of trainees for each of the Zones (in line with the calendar defined under activity 3.2).
	Regular update of the assessment of training needs of the various groups of service providers.
	Organize basic training sessions for service providers and FFS trainers.
	Organize refresher and update courses for service providers and FFS trainers.
4.3 Farmer training and advice	Organize training sessions, farmer field schools etc.
	Monitor the implementation of the agricultural advisory service contracts.
	■ Update rating of service providers.
4.4 Monitoring of the use and effects of extension materials	Develop monitoring tools for regular feedback on the use of training and extension materials.
and training curricula	Elaborate terms of reference for in-depth surveys among end-users of agricultural advisory services.
	■ Implement in-depth surveys.
	Present and discuss results from regular feedback and in-depth surveys.
5.1 Baseline study and end of project outcome assessment	<ul> <li>Meeting to design the baseline survey (combined with meeting under activity 5.2)</li> </ul>
	■ Implementation of the baseline survey
	<ul> <li>Meeting to discuss the consequences of the results of the baseline survey for the project activities and indicators for monitoring and evaluation</li> </ul>
	<ul> <li>Meeting to design the end-of-project outcome assessment.</li> </ul>
	■ Implementation of the project outcome assessment
5.2 Development and implementation of an M&E for learning framework	<ul> <li>Design of the M&amp;E for learning framework in a programme start-up workshop (combined with the design of the baseline survey of activity 5.1)</li> </ul>

Main activities	Inputs / efforts	
	• Initiation of 2 programme task forces, one for the Agricultural Advisory Services (AAS task force) and one for the Seed task force.	
	<ul> <li>Regular meetings of the programme task-forces assessing the programme progress compared to the set indicators, but also critically looking at the activities and indicators themselves.</li> </ul>	
	■ Formulating adjustments to the programme DTF to be endorsed by the programme steering committee	
	■ Documenting experiences of the programme	
	■ An end-of-programme workshop to document the main findings	
5.3 Experience based policy making	<ul> <li>Update the Rwanda national seed policy at the start of the programme based on the insights of the AFSR project, and again by the end of the programme.</li> </ul>	
	<ul> <li>Update the National Agricultural Extension Strategy (NAES) at the start of the programme based on the insights of the PASNVA project, and again by the end of the programme.</li> </ul>	
5.4 Contribute to the formulation and implementation of a national sector-wide gender strategy and action plan	<ul> <li>Participate actively in the elaboration of the gender strategy of MINAGRI</li> <li>Contribute to the formulation of the MINAGRI gender action plan</li> </ul>	

# 7.2 Detailed budget per year

	Mode							
BUDGET TOTAL	d'exéc.	TOTAL	%	ANNEE 1	ANNEE 2	ANNEE 3	ANNEE 4	ANNEE 5
Objectif spécifique: Improved access to advisory services for crop and livesto	ck and							
A access to and use of high quality planting materials, for men and women		15.285.280 6.008.600	85% 33%	2.956.370 1.137.150	3.621.370 1.539.150	3.539.370 1.527.150	3.343.370 1.375.150	1.824.800 430.000
SPAT II : SP 1.5.1  Seed production chains of specific groups of food crop with a market value		6.006.600	33%	1.137.150	1.539.150	1.527.150	1.373.130	430.000
A 01 are professionalized		4.022.600	22%	719.150	1.054.150	1.054.150	917.150	278.000
A 01 01 Prepare tailor made strategies and action plans for marketable crops with	СО	283.000	2%	70.750	70.750	70.750	70.750	210.000
A 01 02 Participatory variety selection for major marketable crops with market value	CO	480.000	3%	60.000	120.000	120.000	120.000	60.000
A 01 03 Improving efficiency of foundation seed production	CO	355.000	2%	45.000	90.000	90.000	90.000	40.000
A 01 04 Production of foundation seeds (zonal RAB revolving Fund)	CO	280.000	2%	90.000	90.000	90.000	10.000	
A 01 05 Building the capacity of certified and local seed multipliers	CO	515.000	3%	60.000	150.000	150.000	103.000	52.000
A 01 06 Season long field training seed multipliers (potatoes miltipliers and seed	СО	496.000	3%	60.000	120.000	120.000	120.000	76.000
A 01 07 Basic seed for starting seed multipliers	CO	400.000	2%	50.000	100.000	100.000	100.000	50.000
A 01 08 Subsidies equipement and infrastructure for privale seed multipliers (seed	СО	400.000	2%	50.000	120.000	120.000	110.000	
A 01 09 Installation of seed gardens (other than potato and cereals)	СО	180.000	1%	30.000	50.000	50.000	50.000	
A 01 10 Development and adaptation of quality control systems apppropriate for	СО	480.000	3%	165.000	105.000	105.000	105.000	
A 01 11 Zonal seed quality control officers (provision for 4 officers)	СО	153.600	1%	38.400	38.400	38.400	38.400	
A 02 Increased private sector involvement in the seed sector		1.986.000	11%	418.000	485.000	473.000	458.000	152.000
A 02 01 Int. Technical Assistant: Seed Business (48 months)	REG	624.000	3%	156.000	156.000	156.000	156.000	
A 02 02 Seed chain managers (provision for 8 managers)	CO	384.000	2%	96.000	96.000	96.000	96.000	
A 02 03 Provision for computer kits (quality control officer and seed managers	CO	24.000	0%	12.000	12.000			
A 02 04 Transform basic seed production RADA seed unit into a Rwanda Seed	CO	377.000	2%	70.000	79.000	79.000	79.000	70.000
Support the professionalization of private multipliers and the development of	CO		2%					
A 02 05 a seed handling, packaging and marketing enterprise		290.000		44.000	62.000	62.000	62.000	60.000
$_{\rm A}$ $_{\rm 02}$ $_{\rm 06}$ Match making between private seed producers and entrepreneurs and credit	CO	60.000	0%	0	20.000	20.000	20.000	
A 02 07 Support the establishment of a private tissue culture laboratory	CO	70.000	0%	10.000	20.000	20.000	10.000	10.000
A 02 08 Support the start-up of the Rwanda Agro-Biodiversity Center	CO	157.000	1%	30.000	40.000	40.000	35.000	12.000
SPAT II : S.P. 2.1 - 2.2 - 2.3		8.685.680	48%	1.729.220	1.962.220	1.892.220	1.818.220	
Sustainable mechanisms for demand articulation and responsiveness of								
A 03 market-orientated advisory services		3.793.600	21%	759.700	861.700	801.700	776.700	593.800
A 03 01 National technical Assistance for agricultural advisory services for Rab HQ	CO	465.600	3%	116.400	116.400	116.400	116.400	0
A 03 02 Equipment for computer kits	CO	40.000	0%	10.000	30.000	0	0	0
Set up District Agricultural Platforms, zonal advisory teams and a National	CO		2%					
A 03 03 Agricultural Advisory Service Committe		350.000		71.900	76.900	71.900	66.900	62.400
A 03 04 Regular demand-articulation and needs assessment for advisory services	CO	284.000	2%	58.800	68.800	58.800	48.800	48.800
A 03 05 Stakeholder meetings	CO	248.000	1%	49.600	49.600	49.600	49.600	49.600
A 03 06 Inventory and registration of proximity agricultural advisory service providers		100.000	1%	29.000	34.000	19.000	9.000	9.000
A 03 07 Contract agricultural service providers	CO	506.000	3%	64.000	126.000	126.000	126.000	64.000
A 03 08 Market-orientied advisory services for 4 years and 30 districts	со	1.800.000	10%	360.000	360.000	360.000	360.000	360.000

	Proximity agricultural advisors capable of delivering responses to the								
A 04	demands of farmers, livestock breeders and their organizations		4.892.080	27%	969.520	1.100.520	1.090.520	1.041.520	690.000
A 04 0	AT Participatory Research and Extension	REG	624.000	3%	156.000	156.000	156.000	156.000	0
A 04 0	3 Training of proximity agricultural advisory service providers	CO	340.000	2%	42.000	78.000	78.000	74.000	68.000
A 04 0	4 Training of trainers FFS curricula (1st line)	CO	600.000	3%	120.000	120.000	120.000	120.000	120.000
A 04 0	5 Training of trainers FFS curricula (2nd line)	CO	360.000	2%	72.000	72.000	72.000	72.000	72.000
A 04 0	6 Other farmer training	CO	360.000	2%	50.000	85.000	85.000	85.000	55.000
	8 Farmer field schools all districts 2350 FFS in 30 district	CO	1.645.000	9%	329.000	329.000	329.000	329.000	329.000
A 04 0	Monitoring of the use and effects of extension materials and training	co	90.000	1%	20.000	30.000	20.000	20.000	0
	SPRAIDUIAS.P.4		591.000	3%	90.000	120.000	120,000	150.000	111.000
	Lessons learned on agricultural advisory services and seed documented a	ndCO							
A 05	used in policy and decision making		591.000	3%	90.000	120.000	120.000	150.000	111.000
A 05 0		СО	143.000	1%	71.500				71.500
A 05 0		CO	106,000	1%	26.500	26.500	26.500	26,500	71.500
	3 Experience based policy making	CO	244.000	1%	30.000	50.000	60.000	70.000	34.000
A 105 10	Contribute to the formulation and implementation of a national sector-wide		244.000	1%	30.000	30.000	00.000	70.000	34.000
1.   -   -	gender strategy and action plan		22.22	170	40.000	05.000	25 222		40.000
A 105 10	· · · · · · · · · · · · · · · · · · ·		98.000		10.000	25.000	25.000	20.000	18.000
X	Réserve budgétaire (max 5% * total activités)		407.420	2%	0	125.000	125.000	125.000	32.420
X 01	Réserve budgétaire		407.420		0	125.000	125.000	125.000	32.420
	1 Réserve budgétaire COGESTION	CO	307.420	2%	0	100000	100000	100000	7420
X 101 10	2 Réserve budgétaire REGIF	RFG	100 000 <b>2.307.300</b>	1%	588.000	25000	25000 <b>518.200</b>	25000 <b>392.000</b>	25000
7 04	Moyens généraux			13% 9%		558.000			251.100
7 01	Frais de personnel	DEO	1.594.800		390.000	390.000	390.000	234.000	190.800
Z 01 0		REG	1.248.000	7%	312.000	312.000	312.000	156.000	156.000
+++	AT Contract and Finance	RFG	468 000	3%	156.000	156.000	156.000		
++	AT training and communication (DELCO)	REG	780.000	4%	156.000	156.000	156.000		156.000
Z 01 0	2 National technical assistance to the Programme Manager 2	CO	172.800	1%	43.200	43.200	43.200	43.200	0
$\vdash$	M&E officer	CO	57.600	0%	14.400	14.400	14.400	14.400	
++	Procurement officer	CO	57.600	0%	14.400	14.400	14.400	14.400	
++	Financial management officer	CO	57.600	0%	14.400	14.400	14.400	14.400	
Z 01 0	3 BTC finacial and administrative support	REG	120.000	1%	24.000	24.000	24.000	24.000	24.000
+++	LAF	REG	90.000	1%	18.000	18.000	18.000		18.000
	Admin Assistant	RFG	30 000	0%	6.000	6.000	6.000	6.000	6.000
7  01  0	4 Autres frais de personnel : drivers	REG	54.000	0%	10.800	10.800	10.800	10.800	10.800
7 00	IChauffeur (3)	REG	54 000	0%	10.800	10.800	10.800		10.800
<i>Z 02</i> 7 02 0	Investissements  1 Véhicules	DEC	131.000	1%	107.000	6.000	6.000	6.000	6.000
		REG	75.000	0%	75.000			0.000	0.000
7 02 0	2 Equipement bureau 3 Equipement IT	REG	39.000 12.000	0% 0%	15.000	6.000 0	6.000	6.000 0	6.000
		REG		0% 0%	12.000 5000		<u>0</u>	0	<u>0</u>
Z 10210	4 Aménagements du bureau	REG	5.000	0%	5000	0	0	01	U

Z 03	Frais de fonctionnement		341.500	2%	63.500	74.500	74.700	74.500	54.300
Z 03 0	1 Services et frais de maintenance	REG	2.500	0%	500	500	500,0	500,0	500
Z 03 0	2 Frais de fonctionnement des véhicules (carburant, entretien et assurance et mainter	REG	115.500	1%	23.100	23.100	23.100,0	23.100,0	23.100
Z 03 0	3 Télécommunications	REG	12.000	0%	2.400	2.400	2.400,0	2.400,0	2.400
Z 03 0	4 Fournitures de bureau	REG	79.200	0%	15.000	16.000	16.200,0	16.000,0	16.000
Z 03 0	5 Missions ATI (per diem)	REG	79.800	0%	15.000	20.000	20.000,0	20.000,0	4.800
Z 03 (	6 Frais de représentation et de communication externe	REG	40.000	0%	5.000	10.000	10.000,0	10.000,0	5.000
Z 03 0	7 Frais financiers	REG	12.500	0%	2.500	2.500	2.500,0	2.500,0	2.500
Z 03 (	8 Frais TVA	REG	0	0%					
Z 04	Audit et Suivi et Evaluation		240.000	1%	27.500	87.500	47.500,0	77.500,0	0
Z 04 (	1 Frais de suivi et évaluation (MTE & FE)	REG	60.000	0%		30.000		30.000,0	
Z 04 (	2 Evaluation of the implementation arrangement	REG	10.000	0%		10.000			
Z 04 (	3 Audit	REG	60.000	0%		20.000	20.000,0	20.000,0	
Z 04 (	4 Scienific and Technical support	REG	80.000	0%	20.000	20.000	20.000,0	20.000,0	
Z 04 0	5 Backstopping	REG	30.000	0%	7.500	7.500	7.500,0	7.500,0	
TOTA			18.000.000		3.544.370	4.304.370	4.182.570	3.860.370	2.108.320
-									
		REGIE	2.670.000	15%	658.800	658.800	658.800	502.800	190.800
	COGE	STION	15.330.000	85%	2.885.570	3.645.570	3.523.770	3.357.570	1.917.520

# 7.3 Chronogram for the first four years

RESULT 1: Seed production chains of specific groups of food crops with a mark	cet va	lue ar	e prof	essio	nalize	ed										
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
1.1 Prepare tailor made strategies and action plans for groups of crops with si	milar	seed :	syster	n opp	ortur	nities										
Studies of the economics of certified and informal seed																
Stakeholder meetings to elaborate seed strategies																
Elaborate seed strategies																
Regular seed chain actor meetings																
1.2 Participatory variety selection for major food crops with market value																
Priority setting for participatory variety selection and promotion																<u> </u>
Participatory variety trials																
Participatory taste and quality assessments																
1.3 Improving efficiency of foundation seed production																
Studies for business plan development foundation seed production zonal RAB offices																
Initiation of revolving funds for foundation seed production zonal RAB offices																
Fine tuning of the rapid multiplication of potatoes																
Initiate cold storage for potato mini-tubers in Musanze																
Support private sector foundation seed production vegetatively propagated crops																
1.4 Building the capacity of certified and local seed multipliers																
Priority setting for capacity building of certified and local seed multipliers																
Develop curricula for training of seed multipliers of specific prioritized crops																
Training of trainers on seed multiplication																
Construction of seed stores with promising seed businesses																
1.5 Development and adaptation of quality control systems appropriate for the	differ	ent gr	oups	of cro	ops											
Training seed multipliers on requirements for certified production																
Setting up quality control systems for Quality Declared Seed (QDS)																
Assisting in making the certification system more independent and auto-financing																

				1		_			_	_						
RESULT 2: Increased private sector involvement in the seed sector				L.		<u> </u>				L						-
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
2.1 Transform the basic seed production of RADA seed unit into a Rwanda Seed Ente	rprise			_						1						<b>—</b>
Prepare a business plan for the Rwanda Seed Enterprise																<u> </u>
Study and adapt the legal framework for the Rwanda Seed Enterprise																<u> </u>
Present business plan for the Rwanda Seed Enterprise to decision makers										$\bot$						<u> </u>
Support the transition process from RADA seed unit to Rwanda Seed Enterprise																<u> </u>
Train RSE staff in seed business management																<u> </u>
Initiate contracts Rwanda Seed Enterprise - RAB foundation seed production																<u> </u>
Initiate contractual linkages between RSE and long term projects sourcing seeds																<u> </u>
Initiate where necessary contract farming arrangements with seed multipliers																
2.2 Support the professionalization of private multipliers and the development of a s	eed ha	ndling	, packa	aging	and m	arketi	ng ent	erpris	se							
Support the transition of the CC-AFSR into a Seed Growers Association																<u> </u>
Feasibility studies, business plan development and legal advise																
Technical support in the field seed handling, treatment, packaging and marketing																
Linking seed handling, packaging and distribution enterprises to projects																
Match making with financial institutes																
If required, limited co-investment in equipment needed for emerging enterprises																
2.3 Match making between private seed producers and credit providers																
Support seed businesses in elaboration and defence of credit proposals																
Lobby with financial institutions for the consideration of credit proposals																
Develop tailored financial products for seed multiplication with financial partners.																
Data collection to support credit providers asses credit requests																
2.4 Support the establishment of a private tissue culture laboratory																
Support business plan development for private tissue culture facilities																
Guarantee a long term contract for tissue culture materials																
Co-invest and experiment with potato aeroponics																
Assure inspection services of materials under multiplication																
Provide technical support and training for the tissue culture laboratory staff																
Support exchange visits to other private tissue culture laboratories in the region																
Assure that publicly run tissue culture laboratories produce at a cost-recovery basis																
Provide a tax-holiday for profits from the tissue culture enterprise																
2.5 Support the start-up of the Rwanda Agro-Biodiversity Center																
collection, characterization, and storage of maize, beans and ind. vegetables PGR																
Promote the active use of plant genetic resources through (re-)introduction																
oach the R-ABC staff in collection and operating the gene-bank																
Elaboration a multi-year operational plan																
Build connections with other genetic resource conservation units in the region																
Support the access of resources based on the operational plan																

RESULT 3: Sustainable mechanisms for demand articulation and responsive	ness	of ma	rket-c	rien	ted a	dviso	ry ser	vices								
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
3.1 Set up District Agricultural Platforms, Zonal Agricultural Advisory Service Teams a	nd a N	ationa	l Agric	ultura	al Advi	isory S	ervice	Comr	nittee							
Review of the mandate of District Agricultural Platforms and elaboration of toR																
Restructuring of the existing 11 platforms.																
Initiation of platforms in the remaining 19 districts.																
Assure embedding and recognition of the District Agricultural Platforms																
Training of platform facilitators (district agronomists).																
Convene quarterly and special meetings of the district platforms.																
Set-up of the zonal Agricultural Advisory Service teams (zonal AAS teams).																
Set-up of the National Agricultural Advisory Service Committee (NAASCO).																
Define the calendar of events in a cycle of planning, monitoring and assessing																
3.2 Regular demand-articulation and needs assessment for advisory services																
Design needs assessment methodology.																
Train AAS teams and District agricultural Platforms on needs assessment methodology.																
Field work related to the needs assessment.																
Aggregate data and information on needs coming from the grassroots level.																
Differentiate needs according to the priority commodities and categories of households	· .															
Analyze market-orientation, district development plan and national policy fit																
Assess needs to build service provision capacity																
3.3 Inventory and registration of proximity agricultural advisory service providers																
Prepare pragmatic criteria for service provider registration in the database.																
Making the inventory of service providers per District and Zone.																
Initiate a satisfaction rating system for advisory service providers.																
Review and improve the categorization system of service providers in AMIS.																
Publish the information on service providers in the yellow and white pages of AMIS.																
3.4 Contract agricultural advisory service providers																
Development of a procedure for granting service provision contracts.															$oxed{oxed}$	
Prepare the terms of reference for the provision of services															$oxed{oxed}$	$oxed{oxed}$
Selection of service providers while relying on the Zonal directories															$ldsymbol{ldsymbol{eta}}$	
Coordinate the provision of services																

RESULT 4: Proximity agricultural advisors capable of delivering responses to the demands of farmers, livestock keepers and their organizations												tions				
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
4.1 Strengthening CICA as a resource centre for agricultural advisory services																
Consult local partners																
Elaborate a plan for developing CICA as a resource centre																
Prepare training materials based on needs assessments																
Prepare Farmer Field School training curricula for priority problems of selected crops.																
Update training and extension materials.																
4.2 Training of proximity agricultural advisory service providers																
Define a calendar for assessing training needs of agricultural advisory service providers																
Regular assessment of training needs of ervice providers.																
Organize basic training sessions for service providers and FFS trainers.																
Organize refresher and update courses for service providers and FFS trainers.																
4.3 Farmer training and advice																
Organize training sessions, farmer field schools etc.																
Monitor the implementation of the agricultural advisory service contracts.																
Update rating of service providers.																
4.4 Monitoring of the use and effects of extension materials and training curricula																
Develop tools for monitoring the use of training and extension materials.																
Elaborate in-depth surveys among end-users of agricultural advisory services.																
Implement in-depth surveys.																
Present and discuss results from regular feedback and in-depth surveys.																

RESULT 5: Lessons learned on agricultural advisory services and seed doc	ument	ed an	d use	d in	policy	/ and	decis	ion n	nakin	g						
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
5.1 Baseline study and end of project outcome assessment																
Meeting to design the baseline survey (combined with meeting under activity 5.2)																
Implementation of the baseline survey																
Meeting to discuss baseline survey results																
Meeting to design the end-of-project outcome assessment.																
Implementation of the project outcome assessment																
5.2 Development and implementation of an M&E for learning framework																
Design of the M&E for learning framework in a programme start-up workshop																
Initiation of 2 programme task forces																
Regular meetings of the programme task-forces																
Formulating adjustments to the programme DTF																
Documenting experiences of the programme																
An end-of-programme workshop to document the main findings																
5.3 Experience based policy making																
Update the Rwanda national seed policy																
Update the National Agricultural Extension Strategy (NAES)																
5.4 Contribute to the formulation and implementation of a national sector-wide gen	der stra	ategy	and ac	tion p	lan											
Participate actively in the elaboration of the gender strategy of MINAGRI																
Contribute to the formulation of the MINAGRI gender action plan																

## 7.4 ToR long-term personnel

## 7.4.1 ToR of TA Training and Communication

**Duration:** 60 months

Function:

#### As BTC DELCO

- Working under the authority of the BTC Resident Representative
- Responsible of the overall co management of the programme and of the team of ITAs

#### As Technical Assistant

- Working under the authority of the BTC Resident Representative and the Director of the RAB unit under which CICA falls
- Strengthening, in collaboration with other MINAGRI/RAB entities, CICA in its new role as a resource centre for decentralized, pluralistic and demanddriven agricultural advisory services.
- Cooperating with the Head and Staff of CICA.
- Collaborating with the international TA Research and Extension, TA Seed business and local TA for agricultural research and development.

#### Tasks:

- DELCO Responsibility, following the BTC procedure.
  - o Prepare the annual planning and budget
  - Prepare and control the MOU and its implementation
  - Coordinate the International Technical Assistant
  - Reporting to the Steering Committee and BTC
  - o Reporting of the monthly accounting system (FIT)
- Support the Head and Staff of CICA in
  - Developing their strategic and business plan for the next five years allowing CICA to become a national resource and reference centre for agricultural advisory services in Rwanda.
  - Developing and strengthening its working relations with RAB national office, particularly research and extension, Zonal offices (AAS teams) and the District Agricultural Platforms.
  - Developing and extending its relationships with similar resource centers in the East and Central Africa region.

- Coordinating its activities in developing training and coaching programmes for agricultural advisory service providers and elaborating communication.
- Provide technical and methodological input to CICA and RAB extension agencies for
  - Diversifying approaches for training and coaching of service providers in agricultural advice and extension and agri-business development including seed business development.
  - Elaborating training materials for the training and coaching of the above-mentioned service providers.
  - Developing a range of extension and communication materials that are adapted to and targeting the specific situations of smallholder men and women farmers in Rwanda.
  - Elaborating methodological tools to be used by District Agricultural Platforms for the participatory assessment of needs for advisory and business development services by different categories of smallholder farmers.
  - Developing a monitoring and learning system for assessing the relevancy, effectiveness and results the use of training and coaching, extension and communication materials as all levels.
- Give technical and methodological back up to RAB Zonal offices, District Agricultural Platforms and agricultural advisory service providers on
  - The use of extension and communication materials and training and coaching materials.
  - The facilitation and dynamics of the multidisciplinary Zonal Agricultural Advisory Service teams in their role as back up and support to District Agricultural Platforms and agricultural service providers
  - The facilitation and dynamics of the multidisciplinary of the District Agricultural Platforms as coordination and learning platforms.
  - The relationships of District Agricultural Platforms with other support projects in the field of agricultural research and development.

#### Profile:

- MSc in rural sociology with specialization in rural extension.
- At least ten years of the experience in the development of demand-driven, market-oriented agricultural extension programmes and approaches.
- Knowledge of adult training techniques, participatory approaches and particularly of the Farmer Field School approach.

- At least five years of experience in the public sector in the East and Central Africa region.
- Knowledge of reform processes in the agricultural sector (market access by smallholder farmers, value chain development, decentralization, outsourcing of services).
- Flexible attitude, facilitation skills and working in multidisciplinary teams.
- Knowledge of English and French.
- Strong knowledge of socio-economy of smallholder farmers, gender and gender mainstreaming processes.

#### 7.4.2 ToR of TA Seed Business

**Duration**: 42 months

#### Function:

- Working under the overall authority of the BTC Resident representative and the direct authority of the DELCO
- Support the transition of the Rwandan seed system from a public driven to a private sector driven system
- Providing technical assistant and advise to MINAGRI implementing structure:
   RAB (Ex RADA and ISAR)
- Working in collaboration of the RAB Programme Contracting Manager

#### Tasks:

- Support the transition of the seed production by RADA seed unit into a commercially run Rwanda Seed Enterprise
- Advise in the development of business plans for private seed enterprises at different scales
- Advise on the facilitation of the emergence of private seed distributors
- Support the RAB seed chain managers in the development of crop specific seed strategies
- Provide input into the CICA and RAB efforts to train seed multipliers
- Supervise the studies of seed economics
- Supervise and take a lead role in the matchmaking between seed entrepreneurs and credit suppliers

#### Profile:

• MSc in seed technology with experience in seed business or MBA in agricultural business with experience in seed technology

- At least five years of the experience in supporting agricultural business development in Sub-Sahara Africa
- Experience in setting up seed production enterprises in Sub-Sahara Africa
- Experience in supporting the transition of public institutes into commercially run organizations
- Experience in integrated seed system development
- Flexible attitude, facilitation skills and working in multidisciplinary teams.
- Knowledge of English and French
- Sensitivity for gender and gender mainstreaming processes, knowledge is an strong advantage

## 7.4.3 ToR TA Agricultural Research and Advisory Services

Duration: 48 months

#### Function:

- Working under the authority of the Director General of RAB
- Strengthening, in collaboration with other MINAGRI/RAB entities, the collaboration between and continuum of agricultural research and advisory services including support to smallholder seed businesses.
- Cooperating with the Head and Staff of RAB Zonal entities that are in charge agricultural research and extension and seed business development.
- Collaborating with the international TA Communication and Extension, TA Seed business and local TA for agricultural research and development.

#### Tasks:

- Support the Head and Staff of national and Zonal RAB offices in
  - Developing their strategies and approaches for demand-driven, proximity research and advisory services as lined out in the national SPAT II.
  - Adapting and implementing the National Agricultural Extension Strategy.
  - Developing and strengthening working relations within RAB national office, between Zonal offices (AAS teams) and with District Agricultural Platforms.
  - o Strengthening their relationships with regional and international institutes and networks of agricultural research and development.
  - Coordinating its activities in developing research programmes, managing demand-driven, adaptive on-farm research and liaising research and advice.

- Provide technical and methodological input to RAB research and extension for
  - Developing participatory research and extension methods for smallholder men and women farmers engaging in agricultural inputs (seeds) and outputs (value chains).
  - Facilitating the transfer of research results in a user-friendly form to CICA and other actors in the national agricultural advisory and extension system.
  - Elaborating tools for assessing and certifying service providers in agricultural research and advisory services.
  - Developing strategies and approaches for outsourcing agricultural advisory services to the producer organizations, the private sector and the non-governmental sector.
  - Elaborating methodological tools to be used by District Agricultural Platforms for the participatory assessment of needs for research and advisory services and the monitoring of these services.
- Give technical and methodological back up to RAB Zonal offices and District Agricultural Platforms on
  - The use of tools for needs assessment and monitoring of research and advisory services and contracting service providers.
  - The facilitation and dynamics of the multidisciplinary Zonal Agricultural Advisory Service teams in their role as back up and support to District Agricultural Platforms and agricultural service providers
  - The facilitation and dynamics of the multidisciplinary Zonal AAS teams as coordination and learning platforms.
  - The relationships of Zonal RAB offices with other support projects in the field of agricultural research and development.

## **Profile:**

- MSc in agronomy with specialization in agricultural research, a PhD is an asset,
- At least ten years of the experience in the development of participatory, demand-driven, market-oriented agricultural research programmes and approaches.
- Knowledge of adult training techniques, adaptive on-farm research and particularly of the Farmer Field School approach.
- At least five years of experience in the public sector in the East and Central Africa region.

- Knowledge of reform processes in the agricultural sector (input supply, value chain development, decentralization, outsourcing of services).
- Flexible attitude, facilitation skills and working in multidisciplinary teams.
- Sensitivity for gender and gender mainstreaming processes, knowledge is an advantage

## 7.5 ToR for Contracting and Financial Technical Advisor

**Duration**: 18 months 1,5 years, ended with an evaluation. Budgeted for 36 months

#### Tasks:

- Financial management of the program
  - o Assist in budget preparation and financial planning
  - o Validate annual budgets
  - Supervise accounting of main account and operational account
  - Control and approve the accounting of the implementing units
  - Control and validate financial reports of the implementing units
  - Validate consolidated financial reports
  - Monitor budget execution
  - Control and validate cash requests from implementing units and prepare cash requests to fund main account
  - Manage audits and draft actions plans
  - Execute payments or provide non-objection for payments
  - Provide non-objection for commitments
  - o Draft implementation agreements

## Technical assistance

- Provide advice to the MINAGRI in order to improve the financial management and procurement (on request of the MINAGRI)
- o Provide assistance in the development of new procedures and tools
- o Provide advice in the set-up of the Rwanda Seeds Enterprise
- o Provide assistance in the development of the management procedures of the revolving fund.

## **Profile:**

- More than 10 years of experience in financial management and procurement
- At least 5 years of experience in developing projects with the public sector

# 7.6 ToR Short term consultancy - Gender (1 month each year)

## **Function:**

- Under the supervision of the programme manager elaborate a project related gender action plan that will be monitored during the 4 years of the project.
   Each mission will focus on one of the 4 phases of the gender action plan.
- Working in close collaboration with the TA for Agricultural Research and Advisory Services and local TA for agricultural research and Collaboration with the international TA Communication and Extension
- Collaboration with the Gender Focal/Point MINAGRI

## Tasks:

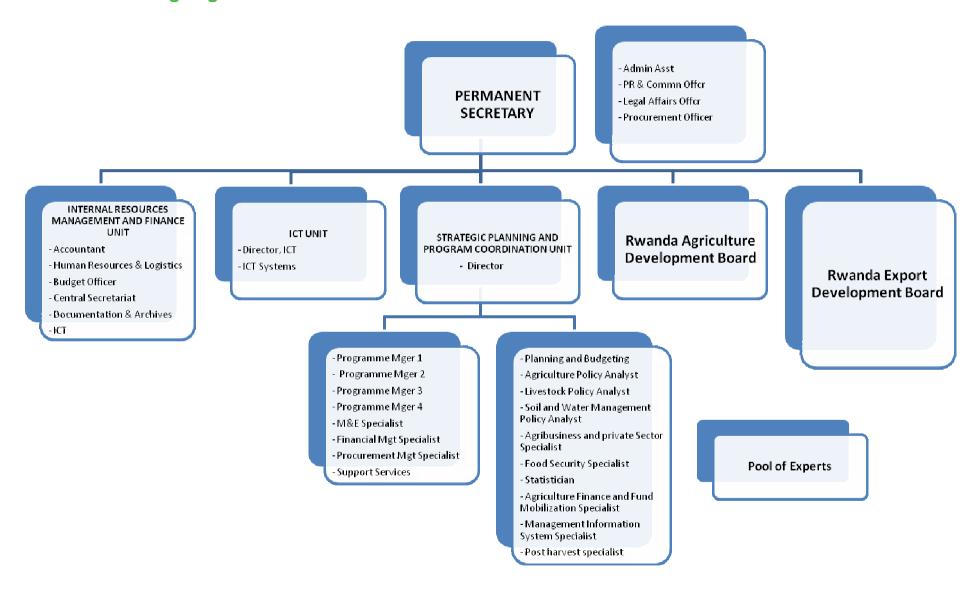
- Support the Gender Focal Point in MINAGRI (GFP)
  - Advise the GFP regarding the elaboration of the gender strategy and action plan, in particular with respect to seed and extension.
  - Develop and strengthen working relations with other agencies having a gender component in their interventions.
  - Strengthen the relationships with the Gender Monitoring Offices and the MIGEPROF.
- Provide capacity building regarding tasks and responsibilities in relation to the project. Support the TA Seed Business
  - Provide technical backstopping and advice on gender issues
     (capacity building, basic analysis, statistics, development of curricula for training, the use of quota,...) and related opportunities and risks.
  - Provide gender specific training needs assessment, in particular regarding training for seed multipliers on requirements for certified production.
- Support the TA Agricultural Research and Advisory Services:
  - o Advise on gender specific methodologies for demand-driven articulation of needs.
  - Develop approaches for gender specific responsiveness of marketoriented advisory services.
  - Advice on the integration of gender in participatory research and extension methods for smallholder men and women farmers engaging in value chains.
  - Provide technical backstopping and advice on gender issues (capacity building, basic analysis, statistics, development of curricula for training, the use of quota,...) and related opportunities and risks.
- Support the TA Communication and Extension

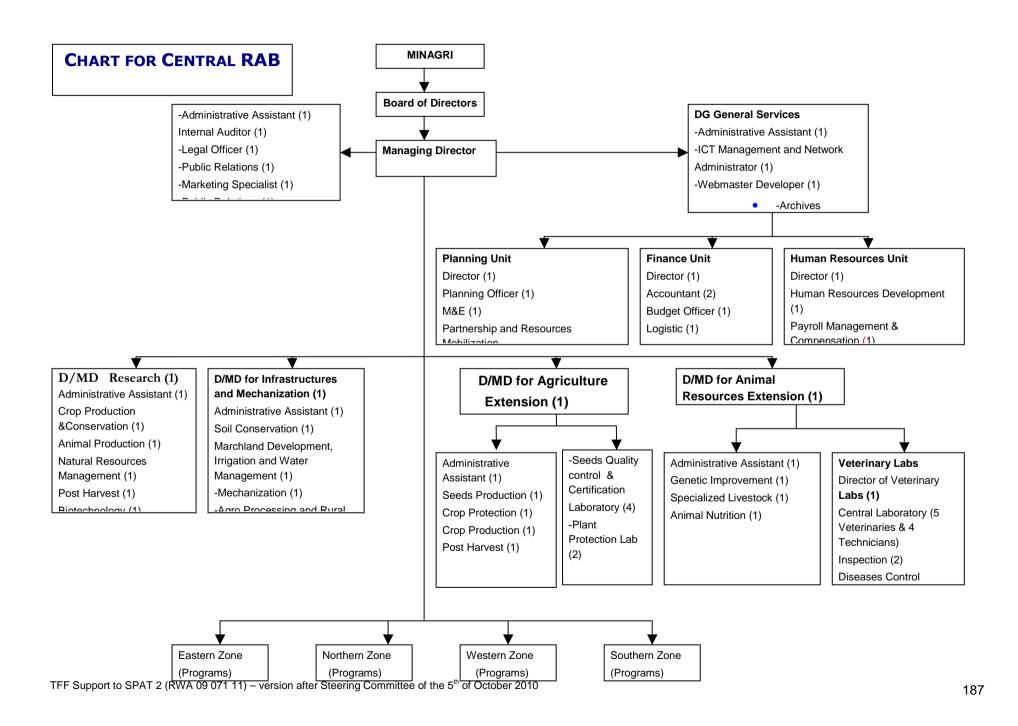
- Advice on the development of a strategic plan for the national resource and reference centre for agricultural advisory services
- Provide technical backstopping and advice on gender issues (capacity building, basic analysis, statistics, development of curricula for training, the use of quota,...) and related opportunities and risks.
- Advice on gender friendly training methodologies, didactic material and tools to be used in several contexts (training and coaching of service providers, extension and training of smallholder farmers, District Agricultural Platforms for participatory assessment of needs for advisory and business development services).
- Advice on gender specific tools and methodologies for monitoring and evaluation (gender sensitive indicators, integration of gender in MTR, final evaluation and annual report,...)

## **Profile:**

- MSc in sociology or related studies with a focus on gender.
- Specialization in agriculture or rural development.
- At least 5 years of the experience in advising participatory, demand-driven, market-oriented agricultural interventions.
- Knowledge of gender specific adult training techniques.
- Knowledge of gender specific on-farm research and approaches.
- Experience with Farmer Field School approach is an asset.
- At least 3 years of experience in the public sector in the East and Central Africa region.
- Knowledge of reform processes in the agricultural sector (value chain development, decentralization, outsourcing of services).
- Flexible attitude, facilitation skills and working in multidisciplinary teams.
- Capable of analyzing complex amounts of information, in order to provide concerted recommendations within a short time-frame.

## 7.7 MINAGRI Organigramme





## 7.8 Seed Strategies for Groups of Crops

## 7.8.1.1 Indigenous vegetables and forage crops

For indigenous vegetables and forage crops limited opportunities are seen for commercial

seed multiplication. The strategy for improving the availability to seed is based on a public effort and the informal seed system.

The Rwanda Agrobiodiversity Centre (see activity 1.5) takes responsibility for the collection, characterization, documentation and (re-)introduction of genotypes.

RAB at zonal level, through its researchers, in collaboration with AVRDC and ILRI for vegetable and forage seeds respectively, will evaluate and select promising germplasm among local and introduced types. This will be mainly done through participatory selection with farmer groups. These farmer groups can be found for example among graduated farmer field schools, or through farmer unions and cooperatives.

Dissemination of selected improved types will be through demonstration in graduated farmer field school groups, farmer organizations, agricultural colleges and other actors with a capacity and interest to contribute to demonstration and dissemination. From these demonstrations further dissemination will take place through the informal seed system. If producers are not in the position to pay a token price for seed form

Informal public system

Indigenous vegetables and forage crops

Rwanda Agrobiodiversity Centre (RABC),
Collection & characterization

ISAR / AVRDC / ILRI
Evaluation, participatory selection
and multiplication

Local demonstration and dissemination (FFS & Agricultural Colleges)

Seeds of improved types

Farmers - informal system

improved types of local vegetable and forage types, subsidized dissemination from the demonstration sites can be considered.

## 7.8.1.2 Banana, cassava and sweet potato

For banana, cassava and sweet potato the proposed strategy builds largely on the public sector for variety selection and initial multiplication, and informal local nurseries for multiplication and dissemination. A limited role is foreseen for private sector in this group. However, for the rapid multiplication step in the laboratory, the establishment of private labs can be supported.

The RAB zonal office responsible for these crops will focus on participatory variety selection. For this advanced clonal material available from IITA

Banana, cassava & sweet potato

ISAR

Participatory variety selection

Public and private labs rapid multiplication

Local nurseries (FFS/Coops & Agricultural colleges)

Quality planting material

Farmers – informal system

(cassava), International Potato Center (Sweet potato) and Bioversity/INIBAP (banana) can be used.

Routine rapid multiplication can be done through both public and private (see activity 1.4) laboratories. It is well possible that this rapid multiplication is not profitable, which would require the programme, and in the longer run MINAGRI, to support this multiplication step in the public interest of keeping clean planting materials flowing into the system, and new varieties becoming routinely available to the producers.

Further multiplication will be conducted in local decentralized nurseries, run by graduated farmer field schools, cooperatives or agricultural colleges, who have received basic training about proper multiplication techniques. From these local nurseries producers can buy disease free cuttings or suckers to renew their plantations, and obtain new varieties. It should be discussed whether these local nurseries could be the same entities that also support the multiplication of seed for forage and local vegetable crops. Such a strategy would only make sense if they are based in the same locality and would require similar skills and infrastructure. Especially for napier grass, which is multiplied vegetatively, this could be considered.

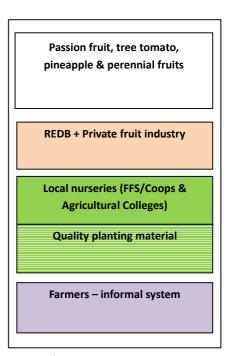
A functioning system of decentralized multipliers is essential for calamities such as cassava mosaic virus, banana diseases, or sweet potato virus complex. This system is largely informal. It would be an option to consider certifying multipliers, as is currently already done on a modest scale by the RADA seed unit, rather than certifying the planting material itself. This is however only useful if the clients are willing to pay a small premium for this certification.

A functioning system of decentralized multipliers is essential for calamities such as cassava mosaic virus, banana diseases, or sweet potato virus complex. This system is largely informal. It would be an option to consider certifying multipliers, as is currently already done on a modest scale by the RADA seed unit, rather than certifying the planting material itself. This is however only useful if the clients are willing to pay a small premium for this certification.

## **7.8.1.3 Fruit crops**

Multiplication of fruit crops is currently not profitable. It is also not foreseen that the willingness and opportunity for small farmers to start acquiring fruit trees will dramatically improve in the near future to numbers that make multiplication commercially attractive.

The main drivers of the fruit chain are private fruit processors. They have an interest in a constant supply of high quality fruits of preferred varieties. Together with the public sector, what is currently RHODA, which will dissolve into the RAEDB, they could take on a responsibility in assuring the availability of disease free planting material of superior genetic materials. This requires in the first place



clean seed of superior types, especially of passion fruit and tree tomato.

Further multiplication from seed has to be assured through local nurseries in which fruit trees are grown, but also grafted citrus, mango and improved avocado trees are grown. Considering the limited profitability of such multiplication this could be done through farmer groups and cooperatives for the benefit of their members. RHODA, through the BTC-MINAGRI project on the support of the horticultural sector, has been piloting a sale subsidy for fruit crops as a tool to stimulate the diffusion of improved varieties of fruit

trees. The development of the 4-year strategy for fruit trees could be done through this on-going project, or in close collaboration with this project. As part of the strategy it should be detailed how this programme is going to assume responsibilities for this sector once the horticulture project ends in 2012.

## 7.8.1.4 Cereals and pulses

In the production of cereals and pulses there are good opportunities for further professionalization and the transfer of tasks from the public to the private sector. Especially in open pollinated varieties of maize private seed producers indicate to obtain good profits. These private producers have emerged with the support of the AFSR project.

At the start of the chain the Rwanda Agrobiodiversity Center has a responsibility for the collection, documentation and (re)introduction of varieties with important agro-biodiversity in Rwanda. This is specifically important for beans, in which Rwanda has an internationally important diversity.

RAB will introduce new varieties form advanced materials that are available through CIAT (beans), CIMMYT (wheat, maize) and IRRI – WARDA (rice). This will be done from those zonal RAB offices resuming the responsibility for these crops. Varieties will be selected through participatory variety selection with producer groups.

Also the production of foundation seed will remain the responsibility of ex-ISAR or RAB. Professionalization of this step of multiplication is required in the form of the introduction of a revolving fund for foundation seed production. The costs for the production should be recovered through charging for this foundation seed.

Currently RADA produces the basic seed of these crops. During the programme the basic seed production of the seed unit of RADA will transform into

Public system private formal system

Cereals (maize OPV, rice, wheat) & Pulses (beans, peas, soybean)

Rwanda Agrobiodiversity Centre (RABC)

Collection, evaluation, (re-)introduction

ISAR / CIAT / CIMMYT
Participatory varietal selection

**RAB – Foundation seed** 

Rwanda Seed Enterprise (RSE)

Basic seed

Private
certified
multiplierss
eed

Packing
enterprise

Contract farming (RSE) Local seed business (FFS/ coops)

Quality declared and certified seed

Agro-input dealers – input cooperatives

CIP – IFDC

Farmers – customers - informal system

a for-profit state enterprise, or a clearly separate service recovering costs (see activity 1.2), that will assume the responsibility for the production basic seed.

The basic seed will be used by private seed multipliers for the production of certified seed. Initially the private seed multipliers will partly to deliver back to the Rwanda Seed Enterprise, but progressively they will develop alternative or their own marketing channels, for example directly to clients or through the private seed packaging and distribution enterprises (see activity 1.3). The private seed multipliers will be supported in establishing a Rwanda Seed Association (RSA), which will be a means for supporting professionalization and seed sector development.

To complement the certified seed production by private seed producers, also local seed businesses who multiply seeds for the local market can be considered as clients for basic seed. A lighter, farmer managed quality control system for Quality Declared Seed (QDS) could be considered for these smaller local seed businesses, as a centralized system is difficult to adapt to a large number of smaller multipliers. The national seed policy foresees the development of such a quality system, which has lower transaction costs, and may result in a faster growth of the seed sector. Local seed businesses seeing good commercial opportunities for certified seeds could gradually develop into private certified seed producers, and join the RSA, thus benefiting from its services.

Seeds will have to be marketed through agro-input dealers and input cooperatives. In this regard a close collaboration with initiatives by the Crop Intensification Program, in collaboration with IFDC, to build a dealer network for agricultural inputs is very strategic. Through such dealer networks quality seed could be made available to the different parts of the country.

## ISAR / Int. Potato Center Participatory varietal selection **ISAR Private labs Mini-tubers Rwanda Seed Private seed Enterprise** producers producers Basic seed potato Private Local seed producers business (FFS/coops) **Rwanda Seed** Association Certified and quality declared seed potatoes **Agro-input dealers Farmers** input coop. customers NGOs - extension CIP - IFDC Farmers customers

Public private system

**Potatoes** 

## **7.8.1.5 Potatoes**

For potatoes the strategy is based on diversification of

actors in all stages of the multiplication. RAB zone North (currently ISAR Ruhengeri) is at the basis of the seed multiplication chain by doing participatory variety selection with advanced clones from International Potato Center.

Mini-tubers will be produced by both RAB zone North as well as a private tissue culture laboratory, through conventional tissue culture, aeroponics or both. Further

experimentation by both RAB and the private sector with Aeroponics will be supported.

These mini-tubers will be multiplied by the Rwanda Seed Enterprise, taking this task from the current RADA. However, at the same time larger private seed multipliers who are currently producing certified seed will become involved in basic seed production.

Basic seed will, in contrast to the current situation, be widely distributed over the country to decentralized seed multipliers. Not only officially registered private multipliers producing seed in the certified system will be allowed to multiply basic seed, but also smaller private or cooperative local seed businesses. This requires investment in capacity building at decentralized level, seed potato stores and credit products for seed potato multiplication. As a local alternative for the centralized understaffed certification system, local systems for quality declared seed potatoes need to be developed. In these systems collaborating producers will be assisted in setting up their own quality control system, leading to a local quality label for their produce if it fulfils the requirements.

Certified seed coming from the members of the Rwanda Seed Association (RSA) can be marketed through the for grains and pulses mentioned dealer network that will be supported through the CIP and IFDC. The decentralized producers can market their produce directly in the vicinity of their farms.

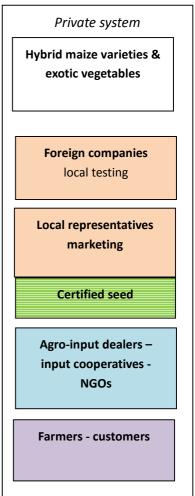
From this system of certified and quality declared seed a quality injection will be given

into the informal seed system.

## 7.8.1.6 Hybrid maize & exotic vegetables

For hybrid maize and exotic vegetables the role of the public system and the informal seed sector is limited. The varieties are the protected property of international companies, who are far superior in this field compared to varieties developed by national research organizations. The strategy to make the best use of the internationally available varieties is focused on providing the opportunity for international companies to test their varieties in different agro-ecologies, to allow them to select those varieties best suited to the Rwandan agro-ecologies and facilitate their provision of services (selling their product) in the Rwandan market without other intermediaries. For this testing local partnership with RAB could be valuable, especially in supporting testing under farmer management participatory trials.

The seed can be distributed through local representatives, and production of hybrid maize could be done within Rwanda by the international companies, rather than having to depend on seed being produced in other countries. Seed can be marketed through local representatives and agroinput dealer networks.



# 7.9 Scheme of FFS training

Illustration of ToT and FFS organisation

Activity	Target: Amount of participants/groups per season															Total amounts		
1: To train first line trainers through TOT		Ye	ar 1		Year 2				Year 3				Year 4				Tolal	Cumulative tota
	SA	No	SB	No	SA	No	SB	No	SA	No	SB	No	SA	No	SB	No		
Training of Trainers - commodity 1		50															50	į.
Training of Trainers - commodity 2		50															50	10
Training of Trainers - commodity 3				50													50	15
Training of Trainers - commodity 4				50													50	20
Training of Trainers - commodity 5						50											50	25
Training of Trainers - commodity 6								50									50	30
Total trainers trained, 1st line		100		100		50		50									300	
2: To train 2nd line trainers (Core Facilitaors)																		
Training of Facilitators (TOF) commodity 1				100		100											200	20
Training of Facilitators (TOF) commodity 2				100		100											200	40
Training of Facilitators (TOF) commodity 3						100		100									200	60
Training of Facilitators (TOF) commodity 4						100		100									200	80
Training of Facilitators (TOF) commodity 5								100		100							200	100
Training of Facilitators (TOF) commodity 6										100		100					200	120
Total facilitators trained per season - 2nd line				200		400		300		200		100					1200	
3: To establish FFS groups (FFS Implementation)																		
FFS implementation 1st generation - commodity 1		30		80													110	11
FFS implementation 2nd generation - commodity 1						80		80		80		80					320	43
FFS implementation 1st generation - commodity 2				80													80	51
FFS implementation 2nd generation - commodity 2						80		80		80		80					320	83
FFS implementation 1st generation - commodity 3						80											80	91
FFS implementation 2nd generation - commodity 3								80		80		80		80			320	123
FFS implementation 1st generation - commodity 4						80											80	131
FFS implementation 2nd generation - commodity 4								80		80		80		80			320	163
FFS implementation 1st generation - commodity 5								80									80	171
FFS implementation 2nd generation - commodity 5										80		80		80		80	320	203
FFS implementation 1st generation - commodity 6										80							80	211
FFS implementation 2nd generation - commodity 6												80		80		80	240	235
Total number of groups per season - 1st & 2nd GN		30		160		320		400		480		480		320		160		
	Key																	
		= Training of Trainers (1st line service providers' training)  = Training of FFS Facilitators (2nd line service providers' training)																
		- 11	aiiiiii	9 011	1312	loma	013 (2	.iiu iii	16 36	VICE	piovi	ueis	Iallill	19)				
		= 18	st gen	eratio	on FF	S (su	pervis	ed by	1stl	ine s	ervice	prov	der)					
		_ 2r	nd an	noroti	on EE	S (01)	noni	and h	v 2no	llino	conid	ce pro	vádor'	\				
		= 2r	iu ger	ierati	ווטוו דר	3 (SU	ipervis	seu D	y 2110	ııııe	SEIVI	ce pro	wuer	,				
NB:																		
1: It is visualized that each FFS trainer (1st line)	will s	tart 2	2 FFS	3 aro	uns d	urina	first (	rener	ation	of th	na en	ecific	com	modi	tv			-

<sup>3:</sup> Actual numbers may vary across, from one commodity to another depending on actual demand during implementation (the present figures is ideal to suit the arrangements and targets
4: The project can train up to **58750 farmers** after the 4 years (Average 25 **farmers per FFS**; total 2350 **FFS**)